

AMERICAN NURSERYMAN

The Nurseryman's Forte: To Make America More Beautiful and Fruitful

JUNE 15, 1942

LIBRARY
MINNESOTA STATE COLLEGE
OF AGRICULTURE AND MECHANICAL ARTS
JUN 15 '42



Berberis Verruculosa

**Operations Under War Conditions
Fragrance in the Hardy Garden
Landscape Planning and Planting
A. A. N. Convention Arrangements**

AMERICAN NURSERYMAN

F. R. KILNER, Editor

Editorial

STAY-AT-HOME GARDENERS.

Much has been made of the fact that wartime restrictions of various kinds will keep folks at home and they will turn to gardening for recreation and develop it as a hobby. The foregone conclusion seems to be that the stay-at-homes will buy plants and set them out, with resulting large benefit to seedsmen and nurserymen. But there is evidence already that we may go too far in that assumption and be disappointed if we complacently await the coming of added business, instead of being good enough salesmen to develop it.

If the stay-at-homes spend their time on ornamental fences, garden furniture, stone construction, gim-cracks and gadgets, they will spend a lot of time at home but not buy many plants. And their grounds will be the reverse of beautiful.

NEED FOR TRADE ETHICS.

When the depression of ten years ago left in wholesale nurseries large quantities of stock that could not be moved through the customary retail channels to the public, much of it was jobbed off to department stores, chain stores, wayside stands, gas stations and the like, to be peddled for whatever it would bring. One could scarcely blame a nurseryman faced with unpaid accounts and a shortage of cash to do whatever he could to raise funds. But the results were deplored by those who were conscientiously engaged in the nursery business as a lifetime occupation, and not just in it for the current dollar.

Faced with probable limitations on transportation, nurserymen may again be tempted to dispose of as much of their stock as possible locally, through any channel available, without regard for the consequences. But that is a shortsighted view. Only the panic-stricken nurseryman will seek to get rid of his stock at sacrifice prices; the clearer-headed businessman will study the problem to see if he cannot control the distribution of the stock, and if he sells half as much

The Mirror of the Trade

at twice the sacrifice price he has done himself a service, maintained the good will of retail nurserymen and held the respect of the public.

When two corner market places in Detroit used five full columns on the front page of the Sunday want ad section of a big newspaper to headline bargains in rosebushes at 15 and 19 cents, "ridiculous prices" on evergreens at \$1.69 and even 89 cents, shade trees at \$1.39, fruit trees at seven or twelve for \$1, shrubs at 15 cents and hedge plants at ten for 49 or 59 cents, it is obvious they must have bought the stock at considerably lower figures in order to be able to lay out the money for so much advertising, besides other selling costs and the dealers' profits.

Did the price the grower got for this stock make the deal worth while? The cash return was obviously small. Local retail nurserymen deplored the effect on their customers. Probably only a fraction of the stock lived to adorn any garden. So it would look as though the grower, his trade customers and the public all got the short end of the transaction, and the only possible beneficiaries were the dealers who took advantage of a temporary opportunity and who tomorrow will have no interest in either the wholesale nurseryman, the retail nurseryman or the public who bought the plants.

If we want the public to respect our merchandise so that retail buyers will pay adequate prices for our plants, we must respect our merchandise ourselves.

NEW AMERICAN CROPS.

One outstanding result of the present war will be new agricultural crops in the United States. Nurserymen may find it profitable to participate in the tests of varieties and the production of propagating material.

One Texas nursery is growing castor beans to supply farmers with the beans for planting. The castor bean has countless industrial uses; the medical use is comparatively insignificant. This country imported 237,000,000 pounds of castor beans in 1940. The pressure of demand for fats and oils has caused the government to prompt huge domestic plantings.

The soybean illustrates what can be done. Unknown a quarter of a century ago, it leaped from a production of 9,000,000 bushels in 1929 to a production of 106,000,000 bushels in 1941.

The normal importation of 350,000,000 pounds of tapioca from the Orient for food and industrial use has been shut off, but government plant breeders have a new type of waxy corn to take its place. This will be grown commercially next year.

Hemp was formerly grown in this country, but nearly vanished in competition with supplies of rope fiber from the far east. Now it is planned to plant 350,000 acres to this crop, chiefly in Kentucky, Wisconsin, Minnesota and Illinois.

About 10,000 tons of kapok were imported from the Orient each year. Scientists say the floss of the common milkweed is just as good, and a "milkweed gin" has been developed which will make harvesting competitive with cheap Oriental labor.

ORDER CARLOADS NOW.

Materials which nurserymen order in considerable quantities and can be stored should be ordered during the summer, if possible, to avoid the possible delay in transportation. A shortage of railroad freight cars may develop in autumn, when the movement of grain will be added to that of coal, ore and war materials. Such items as peat, for instance, might well be ordered early. Operators of greenhouses should get their coal in storage early.

HOW TO GET FARM HELP.

United States Employment Service has recently distributed circulars about its special farm placement service, which may be helpful to nurserymen requiring farm help. If there is a local shortage of experienced help, the service is able to reach out to other sources, and a recruiting campaign is now in progress. There are full-time and part-time offices of the United States Employment Service in every state. If you do not know where to find the nearest one, ask at your post office.

AMERICAN NURSERYMAN

(Registered U. S. Patent Office)

The Nurseryman's Forte: To Make America More Beautiful and Fruitful

VOL. LXXV, No. 12

JUNE 15, 1942

Founded 1904
With which was merged 1939
THE NATIONAL NURSERYMAN
Established 1893

* * * * *

Published on the
first and fifteenth
of each month by the
AMERICAN NURSERYMAN
PUBLISHING COMPANY
508 South Dearborn Street,
Chicago, Illinois.
Telephone: Wabash 8194.

* * * * *

New York
Advertising Representative:
N. L. Huebsch
67 West 44th Street
Telephone: Murray Hill 2-4549

* * * * *

Subscription Price:
\$1.00 per year; outside
United States, \$1.50;
Single Copies, 10c.

* * * * *

Advertising Rates
on application.
Forms close five days
before date of issue.

* * * * *

Entered as second-class matter
December 14, 1933, at Chicago,
Ill., under act of March 3, 1879.

CONTENTS

Operations Under War Conditions.....	5
More Nurserymen's Views on Season's Business	
Landscape Planning and Planting (illus.).....	7
By JOSEPH P. PORTER, Department of Floriculture and Ornamental Horticulture, Cornell University, Ithaca, N. Y.	
A. A. N. Convention Arrangements.....	11
Fragrance in the Hardy Garden.....	14
By C. W. WOOD, Gladwood Gardens, Copemish, Mich.	
This Business of Ours.....	18
By ERNEST HEMMING, Eastern Shore Nurseries, Easton, Md.	
Diseases of Trees.....	20
By LEO R. TEHON, Head of Section of Applied Botany and Plant Pathology, State Natural History Survey, Urbana, Ill.	
Cover Illustration Notes.....	18
Editorial	2
—Stay-at-home Gardeners	2
—Need for Trade Ethics.....	2
—New American Crops.....	2
—Order Carloads Now.....	2
—How to Get Farm Help.....	2
Operations Under War Conditions	5
—Changes This Spring.....	5
—See Better Era Ahead.....	5
—Busiest Season Yet.....	5
—Road to Buying Open.....	6
Victory Harvest Shows.....	6
Victory Garden Play.....	6
Louisiana Meeting	10
Truck Barriers Down.....	10
Seek Pay for Losses in Beetle Campaign	10
A. A. N. Convention Arrangements	11
—Speak on War Problems.....	11
—Dr. C. J. Drake (portrait).....	11
—M. Clifford Townsend (portrait)	11
—P. N. Annand (portrait).....	11
—Entertainment Plans	11
—Program for the Women.....	12
—Hotel Reservations	12
—Trade Exhibits	12
—Transportation	12
Sixty-seventh A. A. N. Convention	13
—Complete Convention Program	13
Obituary	16
—W. F. Ilgenfritz (portrait).....	16
—Mrs. Nettie M. Huntington.....	17
—J. A. Jamison	17
Berberis Verruculosa	18
Michigan Notes	18
Newark Rose Festival.....	19
Rickert Adds to Staff.....	19
Welcome to Breeze Hill.....	19
On the Calendar.....	21
Set Iowa Date.....	21
St. Louis Group to Meet.....	21
Oregon Spring Meeting.....	22
McGill's Advance List.....	23
Help Wanted!	24
Southwestern News	25

INDEX TO ADVERTISERS

American Color & Chemical Co.	25	Herbst Bros.	15	Natorp Co., W. A.	19
American Florist Supply.....	26	Hess' Nurseries	15	Nick's Nursery	24
American Soil Sponge Selling Corp.	24	Hill Nursery Co., D.	19	Nurserymen's Exchange	24
Andrews Nursery Co.	21	Hobbs & Sons, C. M.	21		
Ariens Co.	20	Hogansville Nurseries	21	Oberlin Peony Gardens.....	24
		Ho'ton & Hunkel Co.	19		
Bagatelle Nursery	15	Howard Rose Co.	22	Peterson & Dering, Inc.	23
Bailey Nurseries, J. V.	21	Hydroponic Chemical Co.....	26	Portland Wholesale Nursery Co.	23
Bobbink & Atkins	17			Princeton Nurseries	17
Braden Nursery	24	Innis, Speiden & Co.....	14		
Burr & Co., C. R.	15	Jackson & Perkins Co.	17	Rich & Sons Nursery.....	23
Burton's Hill Top Nurseries.....	21	Jones Nurseries, J. F.	21	Rickert Nurseries	15
				Robinson, E. D.	17
Carlton Nursery Co.	22	Kallay Bros. Co.	19		
Chase Co., Benjamin.....	26	Kemp Mfg. Co.	18	Scarff's Sons, W. N.	21
Cloverset Flower Farm.....	26	Koster Co., Inc.	17	Scotch Grove Nursery.....	21
Colby Pioneer Peat Co.	26			Sherman Nursery Co.....	17
		Lake's Shenandoah Nurseries.....	17	Sherwood Nursery Co.	22
de Wilde's Rhodo-Lake Nurseries.....	15	Leonard & Son, A. M.	26	Sneed Nursery Co.	21
Doty & Doerner, Inc.	23	Lovett, Lester C.	17		
Dummett, Arthur	15			Tardif Domestic Peat Sales Co.	26
		McGill & Son, A.	23		
Evergreen Nursery Co.	19	McHutchison & Co.	26	Verhalen Nursery Co.	21
		Meehan Co., Thos. B.	17		
Forest Nursery Co.	21	Marck & Co.....	28	Waynesboro Nurseries, Inc.....	24
Foster Nursery Co.	21	Milton Nursery Co.	22	Weathered Oak Herb Farm.....	21
		Moran, E. C.	25	Westminster Nurseries	17
Gardner's Nurseries	17	Morse Co., A. B.	25	Williams Nursery Co., L. E.	17
Gravely Mfg. Co.	26	Motz Bros.	23	Willis Nursery Co.	21
		Mount Arbor Nurseries.....	19	Woodruff & Sons, Inc., F. H.....	25

Prepare your advertisement early for the

PRE-CONVENTION NUMBER

AGAIN ALL FOUR COVERS IN FULL COLORS

THE BUYING GUIDE FOR THE SEASON AHEAD

Issued July 15 — forms close July 8

EARLY-BIRD NUMBER

Issued July 1 — forms close June 24

Announcements of exhibits, or representatives to be in attendance at the convention of the American Association of Nurserymen, Kansas City, July 21 to 24, will help you book more and better orders for the season ahead.

Operations Under War Conditions

More Nurserymen's Views on Season's Business

CHANGES THIS SPRING.

Our present observation of this year's spring business shows that our fertilizer sales, which are a big item with us, are off about twenty or twenty-five per cent. In our estimation, the reason for this is that many of the large estates on the north shore are closed temporarily because of threatened invasion, blackouts, tire and gas rationing, etc. The estates are generally supervised by gardeners, the larger percentage of whom know the value of fertilizing, whereas the average person who buys a few plants and a few shrubs has not come to the full realization that plants must be fed properly. Our sales personnel is trying to put over the fact with each small sale that "plants have to eat to live, just as people do," and thus help the customer get better results, as well as increase our fertilizer business.

Spring sales of nursery stock generally have been better than for some years. The same is true of perennials, annuals and bedding plants. New England, which is considered the hub of war production, is favoring us with increased business from the class of people who are the average spenders because they are earning more money. To tire and gas rationing, causing many to stay at home more than usual, and to the victory garden campaign we attribute our increased sales of nursery stock.

Our landscape department has had several good-size planting jobs around factories, offices, etc., which have made an increase in that particular department.

In previous years we have been doing some mail-order business, but this year, because of our country's entry into the war and the trend of business, we have increased our advertising somewhat in magazines and papers and thus broadened our plant mail-order business. With the new perennial items we are offering, we feel we have had a good response in this specialized field.

Even though the above might look exceptionally rosy, we are not over-optimistic regarding the future, be-

cause of the many restrictions we are facing, as well as shortage of experienced help and the material with which to work. **Cliff Corliss.**

SEE BETTER ERA AHEAD.

I liked your article on page 5 in the May 15 issue. As usual, you hit the nail on the head in a pleasant sober way. Every nurseryman just about has to solve his own problems as they come up. As for ourselves, we do not know what to plan for, what is ahead. However, if we want to do business we must have merchandise, and we have planted a fine lot of good things. During the past few years, any surplus labor we could afford to hire we have used to transplant or root-prune, bearing in mind that at any time labor might become scarce or prohibitive. The result of this policy is that we can stand two or three years with a minimum of labor and a maximum of "staying quality."

We are sure that after this war the finer points in plantsmanship will come to the fore as never before. American boys will have traveled and seen things all over the globe. They will have seen things they never dreamed of, some good and some bad, but it will influence their environments once they settle down again. There will not be any trick any more in manufacturing things, and much labor might be diverted to building of municipal show and recreational gardens, parkways and arboretums,

not to speak of a growing desire for improving the home surroundings. There will be fewer hours of work and more leisure, and after all there is nothing more delightful around a home than a pleasant garden.

N. I. W. Kriek.

BUSIEST SEASON YET.

We have gone through the busiest season of our entire business experience and are still not finished. We have not only had the largest volume that we have ever had, but have perhaps four or five times as many unfilled orders on hand as usual at this time of year. It will take four to six weeks to complete them, and more seem to be coming right along. All of this in spite of the very much upset conditions and all the handicaps mentioned in your columns. We have lost many of our better men, and the turnover in common labor has been terrific. This, of course, complicates supervision and can only be overcome by careful planning and being on the job night and day.

Certainly, no one can say that any part of our business is essential to the war effort, but it seems to me that there are many ways in which our sort of work can be continued without impeding or hindering in any way our objective, to win the war.

No doubt, the increased purchasing power of a large part of our population, plus the restrictions on many other items, has made and will continue to make the demand for plant materials increase for the duration. Home gardening in all its forms has many beneficial effects, which are well known and recognized by all. In the center of a defense area such as Dayton has come to be, it is hard to know what would happen if the surplus energies of the workers could not be directed into some form or other. As conditions are now, little else is available to them except to put in their spare hours working in their own yards.

Another angle to the whole affair is that while almost any of us would be willing to give anything to help in the present struggle, there is only

Let's Swap Ideas!

What did you do this spring to meet the labor shortage, scarcity of any materials or other wartime problems?

What ideas have you for doing business next autumn under possible handicaps?

By exchanging ideas, each of us can do better in his respective locality and maintain the nursery business in spite of difficulties.

Send in your suggestions.

room for a given number actually to participate. The rest of us will have to stay home and manage somehow or other to pay the bills. That, it seems to me, is our principal reason for attempting to stay in business at all, and it is a well recognized fact that there will be some bills to pay.

If planting one's home grounds properly is a good investment, as many of us have long claimed, then increased expenditures for such work would be a factor in avoiding further inflation.

Obviously some businesses will have to continue in spite of the war and those, like our own, which are not using vital materials should be encouraged as being of no interference, at least, to the war effort.

With all these conditions, two things are obvious; one is that an increased price will have to be charged for our products; the other is that great caution will have to be used in not raising our prices too rapidly or to excess. This can only result in disaster—either by further governmental restrictions or an unsavory public opinion.

While existing stocks will no doubt sell at good prices, additional plantings of young stock in any but small quantities would seem to be definitely unwise because of the length of time required to mature and the uncertainty of conditions at that time.

Clarence O. Siebenthaler.

ROAD TO BUYING OPEN.

It is interesting to read the discussions in your latest issues relative to the problems of wartime operations.

In the first place, we must face the fact that the armed services of the country have priority on materials and man power, and nurserymen must piece out their business from the remainder.

The army prefers younger men and will leave the middle-aged and the boys in the nurseries. Men of mechanical ability are in demand in defense plants, and that takes truck drivers, repair men, etc., and wages are being increased in defense areas. On the other hand, a number of other businesses are being severely curtailed, such as automobile retailing, building, etc., and some of these men are available for rehiring. Salesmen are being let out in substantial numbers and some of them may be available for nurserymen.

Delivery and transportation are becoming increasingly difficult. Full loads and short hauls will help to reduce rubber wear. In retail areas customers may be encouraged to call for small orders.

While conversion is proceeding at a generally satisfactory rate, many manufacturing firms have not yet made full conversion to war production and they are generally hiring their old employees back in preference to new men who are coming into the defense areas. On the other hand, there will be an increase of personnel in the defense plants throughout the remainder of the current year.

Among customers there is an increased demand for garden services because of the shortage of men, and most nurserymen cannot help out much in this field on account of their own restricted help. If sales fall off in certain sections, some nurserymen can handle more of this work.

People like to visit nurseries, and if their visits can be encouraged this year they will likely buy items which they might otherwise overlook. While there are restrictions on the purchase of cars, refrigerators, houses, etc., the avenue of nursery purchases is entirely open.

Restrictions of travel by automobile will force many persons to remain at home for a greater proportion of their time, and their gardens should improve by the change. Any encouragement in changing the garden around, as the housewife changes the furniture, will undoubtedly aid the sales of stock. Some persons are never happy unless they are changing their grounds.

In general, nurserymen face higher costs, restriction of help and deliveries, somewhat better buying power and a period of war transition.

Ralph I. Coryell.

ANOTHER boy, named Joseph, arrived June 4 at the home of P. P. Pirone, plant pathologist at the New Jersey experiment station, New Brunswick, and secretary of the New Jersey Association of Nurserymen.

THE show grounds of the Blue Ridge Nursery, on River drive, Harrisburg, Pa., have been abandoned because of labor conditions there, according to the owner, Dick Guldmond, and operations are now conducted from the nursery at Linglestown, Pa.

VICTORY HARVEST SHOWS.

Twenty thousand flower, vegetable and fruit shows will be held throughout the United States during the month of September in an effort to raise \$2,000,000 for the joint benefit of the Army emergency and Navy relief funds. The plan has the endorsement of several hundred organizations, and thirty-seven national societies are being invited to appoint state representatives who will serve as state committees to stimulate and aid the effort.

Secretary of Agriculture Claude R. Wickard said, "I think the idea of holding such shows and turning over the receipts for Army emergency and Navy relief is an excellent one, provided, of course, that all services be voluntary and that there be no large overhead expenses to materially lessen the funds available. I think the idea of having no prizes is to be commended and I am quite sure the country over, the proposal will meet with great response."

Richardson Wright is chairman of the national committee, and J. W. Johnston has been named by the Navy Relief Society to its special events committee as coordinator between the society and the various show committees.

VICTORY GARDEN PLAY.

Opportunity for interested organizations, such as garden clubs, 4-H groups and the like, to promote interest in victory gardens and at the same time to raise funds for relief organizations is presented in the current issue of the American Home magazine. An article describes "A Vegetable Convention," a clever fantastic play written, and once produced, by Elizabeth Tryee Metcalfe, formerly an actress and now a member of the Garden Club of America and the Bedford Garden Club. Colorful costumes are described and pictured, the players representing individual vegetables. Copies of the playbook, with dialogue, cast, stage business and eight sheets of illustrated costume directions, can be had from the American Home, New York city, for 15 cents apiece, or at 10 cents apiece in lots of twenty-five.

THE meeting of the Alabama State Nurserymen's and Florists' Association scheduled for June 15 and 16 was postponed.

Landscape Planning and Planting

By Joseph P. Porter

Balance is a consideration that is involved in every problem of landscape planting and design. It is so closely related to the specific subject of axis that it becomes a definite part of the problem itself, and the quality of a solution depends greatly upon the balance achieved. Its consideration must precede or follow any study of axis lines. Balance is one of the great principles of art, common to every phase and application and essential in all satisfying production.

Balance in landscape is the equilibrium existing between all the items or factors that can be sensed or observed in any given landscape effect. The recognition of balance on the part of the public is more likely to be subconscious than conscious. An observer examining a garden would say, "What a lovely garden!" or "I do not like that garden." He would never know that his reaction and decision were based upon the degree and quality of balance; he would probably never even think of balance. The trained designer viewing such a garden would not only sense its weak point, but might analyze the situation and say, "This garden does not satisfy because balance is not achieved properly. The border of shrubs and the large tree upon this side are too massive for the hedge and flowers that are opposite. The situation could be greatly improved by using a specimen flowering tree such as a dogwood in conjunction with the flower border." He would be able to point out the spot where the tree should be planted. He would know the size of the tree needed—the weight necessary to produce the effect of stability and balanced interest.

Balance should be secured in all landscaped areas, be they lawns or gardens. Balance is essential wherever axis lines are employed. In fact, every important landscape scene, picture or view should be arranged so that this principle of balance is satisfied. When an observer stands within or walks about an enclosed lawn or garden he should sense that the entire situation is in balance no

XIV. LANDSCAPE DESIGN.

Balance Related to Landscape.

Fourteenth in series of monthly articles on the application of landscape architecture to the property of Mr. Average Citizen, by the professor of landscape design in the department of horticulture at Cornell University, continues discussion of the treatment of the public unit area, or front yard, as to shrub planting for various purposes.

matter where he may stand or in which direction he may be looking.

The openness of lawn or beds of low flowers will be offset by the mass effect of hedges, fences, walls, shrubbery borders, trees and buildings, any or all of which may be used about the boundaries of an area. This we call the balance of void to mass. It is the contrast of low openness to high solid material. It has been said that the development of good boundaries about a lawn or garden area will contribute more toward its beauty and effectiveness than any other single consideration. I quite agree with this statement and wish to point out that it is the mass effect in comparison to and balanced against the void that is basically responsible.

In any area or on any axis line the designer should attempt to secure balance of weight and interest both from side to side and also from end to end. As an example, let us assume that we are standing upon a terrace located outside the living room door of a residence and looking down a turf panel which forms the central part of a flower garden. At the far end is a pool. This is the dominant feature of the garden. Along the sides and rear are flower borders. Back of these are plantings that form a background for the garden and that restrict our view within the area. Looking down the garden one should find that the mass and interest of one side balance the

mass and interest of the other side. He should also sense that the end where he is standing, made up of terrace, plants and residence, is balanced at the far end by the considerable interest afforded by the pool, the flowers, the masses of background shrubs and probably a tree or two. Imagine this garden with the pool moved up to the house end next to the terrace and the shrubs and trees removed from the rear end and in their place a fence with vines substituted. In comparison with the first effect it is easy to comprehend that this new arrangement would be less attractive and definitely lacking in adequate weight along the rear. This weight of pool and massive plants is necessary to offset or balance the weight of the house and terrace.

Some time ago I was talking with a nurseryman who is a rather clever plantsman. He was criticizing a garden that was well designed, but that lacked weight at the rear. His statement was to the effect that the garden lacked finish and conclusion; his recommendation was that a large albizzia and a dogwood be planted, one at either rear corner next to the property line, and a second dogwood be located on the same side as the first dogwood but out in the garden proper midway between the center axis of the garden and the side boundary, where it would function as a free-standing specimen. That was just what the garden needed and all that it needed. What he did was to add weight and interest by the use of the three small trees at the far end to offset the effect of house and porch. It brought the garden into balance.

The term balance as used in this article and by practically all landscape designers is synonymous with the meaning of the word symmetry as used by some artists. Balance seems to be the preferred term, since symmetry is often employed to describe only one form of balance.

There are two distinct forms of balance. These are now known as geometrical and occult balance. They are illustrated in the most simple way

by visualizing a group of children playing at seesaw or teeter-totter with a plank placed over a support such as a sawhorse. If two children of equal weight are involved, the plank is centered over the sawhorse (fulcrum) and a child seated on each end of the plank will cause the arrangement to balance evenly. This is illustrated in diagram 1 of figure 34, where the weight A and the distance X-Y equal the weight B and the distance Y-Z. Geometrical balance is the term used to designate this form of arrangement. The material on one side of the point of balance (fulcrum-axis line) is exactly duplicated upon the other side. Sometimes this type of balance is referred to as formal balance, since the effect is always formal. It fits only the design of formal gardens and formal house facades. Its effect is obvious, dignified and simple, but powerful. It is used where show, pretentiousness and strength are needed in design. The average person tires of the effect of formal balance after a time; the trained designer finds it uninteresting; the contemporary artist would relegate all of it to the scrap heap of worthless ideas. Nevertheless, it has its place, but it is greatly overused.

Let us now return to our seesaw illustration and imagine that two

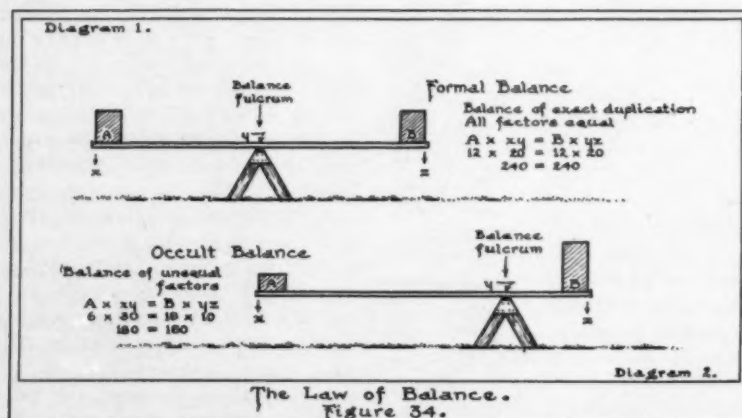
a longer distance X-Y equal a heavier weight B and a shorter distance Y-Z. This figure is also in perfect balance and therefore has symmetry. The balance is just as real and true as in the first case, but the effect is very different. This form of balance is now called occult balance, occult meaning "mysterious, not easily understood." The term asymmetrical balance is still widely used for this form, but its use is a mistake, since the only meaning of asymmetrical is "without symmetry, lacking symmetry" and in art symmetry and balance are identical.

Occult balance might be called informal balance, for in most respects the effect is quite the opposite of the brazen formal aspect of geometric balance. In contrast, it is decidedly informal and never striking or positive. It is, however, both dignified and simple in appearance. While occult balance is invariably sensed, the impression is subtle and never prepossessing. It reflects the unstudied indefiniteness of nature rather than the severe artificiality common to most of man's handiwork. It is indeed a mysterious form of balance, holding the interest, intriguing the imagination, yet ever tending to defy complete discovery and analysis.

As a final contrast, we may say

accurately illustrated and at the same time, note, good balance relative to the optical or perceptual effect, and an interpretation of this is given in figure 35. The law of balance in art is more complicated than the physical law for two main reasons. Physics deals only with two factors, weight and distance from the point of balance. In art we deal with a host of factors, all of which attract our attention and contribute to the "weight" of the perceptual effect. In the plant kingdom we have ground covers, vines, shrubs, trees and flowers; we have deciduous material and evergreens, both broad-leaved and narrow-leaved forms. Each variety differs in form (silhouette), mass (size, bulk), trunk and/or stem character, foliage color and texture, flower display and fruit appearance, all of which contribute to its perceptual effect. Moreover, these effects may vary with the growth of the plant and the season of the year. In addition, the quantity of the plant used in a given situation influences its degree of attention (attracting power) as does its position (location) in relation to masses of other plants or even of the same plant. A single plant (let us say a palm or flowering crab) set as a specimen some few feet in front of a heavy planting attracts much more attention than would a large number of the same variety grouped to form a part of the mass planting itself.

Further complicating the problem is man's handiwork. This shows in a variety of ways. We may clip or trim a plant to form a hedge or a topiary effect. Such treatment usually tends to add weight or perceptual interest to the sheared plants. We may arrange plants to show design lines and effects, using straight or curved lines and even geometrical shapes. Wherever design is obvious, interest is intensified. We take nature's materials and alter them in character and build gravel or steppingstone paths, steps and walls, balustrades and fences, fountains, pools, pergolas and teahouses. We use bricks, stone and stucco, timber and iron. All of these materials and the effects produced with them contribute to the interest or weight of that part of the landscape in which they are used. Even topography, the grading of the land and such natural features as boulders, rock outcrops or a natural piece of water such as



children differing considerably in weight wish to use the device. The plank is now moved on the fulcrum until one end is longer than the other. The heavier child takes his place on the short section while the lighter child on the longer side again brings the outfit into perfect balance. This comparison is shown in diagram 2, figure 34. We now have a situation where a lighter weight A and

that in landscape design geometrical balance is balance of relatively exact duplication on either side of an axis or focal point, while occult balance is achieved through equal values or interests without duplication.

Balance or symmetry in landscape art closely follows the law of balance found in physics. This is indicated by a comparison and study of figure 34, where we have the physical law

a pond, brook or waterfall, enter this picture of landscape balance.

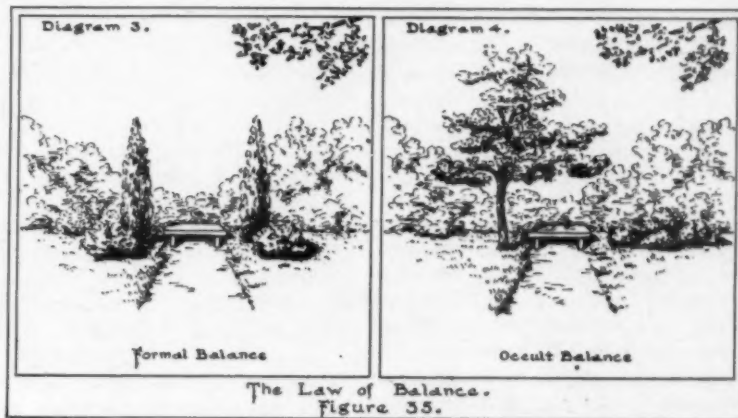
Any or all of these factors (and others that I have not mentioned) may need consideration. Fortunately, we rarely have more than a few of them confronting us in any one actual situation. But whatever they may be, the good designer weighs each one and gives it a perceptual or interest evaluation. It is the sum total of these evaluations that constitute "weight" as we understand it in landscape art. It is now possible for us to see that a timber summerhouse with a vine entwined on one corner and canopied by a small shade tree placed in the right-hand corner of a rear yard might easily offset or balance a bed of garden flowers backed by informal shrub masses set opposite in the left-hand corner. These two effects might balance one another, but for another illustration let us imagine that the summerhouse corner is still too interesting to equal the garden section. If this were the case, then the addition of more weight to the garden would produce good balance. Any number of things might be done to achieve this balance. A pedestal birdbath might be set among the flowers. A group of spirelike evergreens could be introduced into the shrub border back of the flowers. The bed of flowers itself might be enlarged or given additional design effect, perhaps by the addition of a low hedge along its margins such as would be produced by an edging of dwarf boxwood. It might even be possible to place a small flowering tree in the background if it would not shade the flowers too seriously. Thus, in occult balance widely differing items are used on either side of the axis line or point of balance, but the sum total of their perceptual interests to the observer is equal.

We have yet to consider distance. Here again is found a slight complication over distance as it is understood in the physical law. With us, it is more complicated, since in visual balance we see things in perspective. The balance fulcrum in a landscape scheme is not a point, but a continuous line extending through the observer's eyes to the point of balance on the horizon or in the background where the picture is stopped. This, of course, is the axis line of the picture. Any item may be located not only nearer or farther in a lateral

direction—that is, from side to side—in relation to this line, but it may also vary in distance from a point close to the observer to a point far away toward the back or the horizon.

Objects in order to function in a landscape picture must be kept within the observer's range of vision. This means that objects must be close to the observer, or contained within an area limited by a cone approximately sixty degrees in diameter that lies along the balance fulcrum or axis and with its apex or point at the eyes of the observer. Ideally, we should build our pictures within this area. Actually in practice we may extend laterally some distance beyond that limitation, since the eye

foreground contributes less weight than a like one located in the distance. A large tree placed close to the observer will balance a smaller tree placed near a rear property line; detail of house terrace with flowers of warm colors will balance a vine-clad fence with flowers of cool colors located in the distance. Actually then, in landscape work, as far as the factor of distance is concerned, objects may be located anywhere within the cone of vision in relation to the axis of that cone and in relation to the apex of the cone (the eye of the observer), but their relative importance or weight is determined by their distance from the observer.



and mind retain the effect of what has been seen as the head is easily turned from side to side. Just how far the designer may go in extending this lateral range has not yet been determined. I am inclined to believe that the field of vision may be widened to as much as ninety or even 100 degrees, but beyond that distance, I am quite sure, objects tend to lose their significance and importance.

Within this indefinite lateral range, the farther an object is placed from the axis line the greater will be the weight of interest it will balance on the opposite side. A large tree or very important object placed but a short distance from the axis line on one side will be brought into equipoise by a small group of shrubs or a relatively unimportant object on the other side of the axis and farther removed from it (see diagram 4, figure 35).

The variation in importance of items placed near or far from the observer is very similar. In this instance we find that a unit in the

All of this may give the impression that the achievement of balance, especially occult balance, is complicated and difficult, quite beyond the grasp and use of a potential designer. May I assure you that the facts are otherwise? The average student has quickly grasped the idea and with a little practice has consistently produced results showing good balance. While the assigning of weight value to landscape objects may seem difficult, the one who intimately knows plant materials and architectural features has no trouble at all; he instinctively senses their pictorial value. The actual placement or position that they occupy does need study and thought. We shall still need to move a tree this way or that way until we feel certain that it is in the correct location. On important jobs I use disks of colored paper cut to the various sizes of the trees that might be used. These I shift and move about upon my plan until I am confident that their arrangement and balance are satisfactory. I often do likewise with any architectural fea-

tures that I may wish to employ, drawing the pool or summerhouse on a separate scrap of paper and then working with it as with the cutout trees. And right here I might say that models, even though crude in nature, far surpass the use of plans in studying design, for when working with a model and its three dimensions it is practically impossible to make a mistake in balance.

The landscape designer must always visualize all features in their three dimensions. He must think of them as they are, and not only as they appear to the eye, but as they appeal to the imagination and mind of the observer. Always he must secure symmetry, occasionally the static effect of formal balance, much more frequently the dynamic character of the occult.

LOUISIANA MEETING.

Special features for nurserymen at the third annual convention of the Louisiana State Horticultural Association, held at New Orleans, May 24 to May 27, included a group meeting conducted by Paul Abele, New Orleans, and a plant and soil clinic conducted by W. E. Anderson, state entomologist, at which the speakers included several members of the Louisiana experiment station staff.

Mr. Abele emphasized the opportunity in the south to develop horticultural crops formerly produced abroad. In reference to the present problem of labor, he said it would be necessary to mulch heavily in order to keep down weeds and to use more fertilizer than usual in order to get the maximum production from the reduced acreage one may be driven to operate.

Speaking on the possible shortage of insecticide materials, Dr. C. O. Eddy, of the station's staff, referred to the usefulness of cryolite, one of the newer poisons for chewing insects, and expressed the opinion that nicotine and pyrethrum would be adequate.

Dan A. Newsham, New Orleans florist, was reelected president of the association. Elmer A. Farley, New Orleans, was elected vice-president representing nurserymen, and Col. Earl P. Roy, Baton Rouge, vice-president representing landscape men. George P. Dupuy, New Orleans, was reelected secretary-treasurer.

Truck Barriers Down

Similar leveling of state trade barriers in other fields was viewed as likely to follow the unprecedented action of all forty-eight states in agreeing to uniform minimum standards for truck size and weight restrictions and reciprocal license arrangements for motor transport for the duration of the war, as announced June 1 by Secretary of Commerce Jesse Jones.

Reached through the cooperation of state governors within ten days after the move was requested by Secretary Jones and the Council of State Governments, the agreement on the elimination of motor transport barriers went into effect immediately.

With this major barrier now removed under the pressure of wartime efficiency demands, an accomplishment which years of earlier campaigning had failed to achieve, it was expected that pressure would rapidly shift toward the removal of other state trade barriers which have long plagued virtually every industrial and commercial field.

The new emergency formula establishing minimum standards for state limits on motor vehicle sizes and weights will affect about one-third of the states. The more stringent regular restrictions in these states were removed by means of the war powers of the state executives which give them the right to issue executive or administrative orders to further the war effort. While this action is, of course, of a temporary nature, it is expected to ease the way toward permanent legislative removal of the barriers.

Frank Bane, executive director of the Council of State Governments, said the reciprocal license agreement would mean that "if a truck is duly licensed in the state of domicile, no further licensing will be necessary."

Although the agreement applies only to trucks carrying materials essential to the war effort, both Secretary Jones and Frank Bane pointed out that virtually everything was now considered in that class.

The size and weight limits for commercial motor vehicles allowed under the new minimum standards accepted for the duration of the war are: Width, 96 inches; height, 12½ feet; length of a single vehicle, 35 feet;

length of a combination, 45 feet; weight per inch width of tire, 600 pounds; weight on single axle, 18,000 pounds; weight on two axles, 30,000 pounds; weight on three axles, 40,000 pounds; weight on semi-trailers, 40,000 pounds; weight of other combinations, 40,000 pounds.

The movement to eliminate the lack of uniformity in the truck laws and numerous other state legislative barriers impeding industry and commerce was initiated at a conference called by Secretary Jones in Washington May 5. More than 200 state officials attended, and President Roosevelt named a committee to study the matter. This committee met May 20 with the executive committee of the governors' conference. Ten days after this gathering, Secretary Jones and Mr. Bane had succeeded in obtaining agreement of all states on the new uniform minimum standards for truck limits. B. J.

SEEK PAY FOR LOSSES IN BEETLE CAMPAIGN.

A bill calling for the appropriation of \$40,000 to reimburse nurserymen, florists and cattlemen for actual losses sustained because of the campaign against the white-fringed beetle has been presented at the present session of the Louisiana state legislature. Severe restrictions have been placed upon nurserymen in the vicinity of New Orleans by the state and federal authorities conducting the campaign. It is stated that other sufferers from similar losses have been reimbursed, but the nurserymen, florists and cattlemen have not. Some optimism is felt regarding the possibility of the appropriation bill passing the legislature.

AT the annual convention of the Louisiana State Horticultural Association, the Griffing Nurseries, Beaumont, Tex., were represented by Miss Wilma Gunter and Mrs. Odelle Carver.

PLANT pathologists will meet at the Secor hotel, Toledo, O., June 25 and 26 for the summer meeting of the American Phytopathological Society, to be devoted chiefly to the society's war emergency activities.

A. A. N. Convention Arrangements

SPEAK ON WAR PROBLEMS.

With the problems the war brought in handling spring business still in their minds, and faced with others in the season ahead, nurserymen will find keen interest in the A. A. N. convention program because of the important speakers on topics related to these problems of the period.

M. Clifford Townsend, former governor of Indiana and now director of the Office for Agricultural War Relations, United States Department of Agriculture, is charged with developing programs and policies designed to supply sufficient agricultural commodities to meet the needs of the United States and of the democracies, and to provide agriculture with sufficient labor, tools and transportation to carry out its part in the defense effort. In seeking to provide nurserymen with their needs in the defense effort, the A. A. N. has found the cooperation of this office valuable. Mr. Townsend was born on a small farm in northern Indiana and owns and operates a 360-acre farm in Grant county of that state. When his term as governor expired, Mr. Townsend went to Washington in the winter of 1941 to be special agricultural advisor to Sidney Hillman, associate director general of the Office of Production Management. Shortly after the agricultural defense activities were transferred from the National Defense Advisory

Commission to the Department of Agriculture, Mr. Townsend was appointed to head the office by Secretary of Agriculture Claude R. Wickard.

Another member of the Department of Agriculture in close contact with nurserymen's problems is Dr.



M. Clifford Townsend.

P. N. Annand, since last August chief of the bureau of entomology and plant quarantine, succeeding Lee A. Strong in that position. Dr. Annand was born at Telluride, Colo., in 1898 and spent his early life on a ranch in that state. He received a B.S. degree in 1920 from the Colorado Agricultural College, an M.A. degree in entomology from Leland Stanford University in 1922 and a Ph.D. in zoology and botany from Stanford in 1928. From 1934 until 1937 he was head of the division of cereal and forage insect investigations of the bureau of entomology and plant quarantine in the United States Department of Agriculture. In 1937 he was appointed research assistant to the chief of the bureau and in April, 1939, an assistant chief of the bureau. Acquainted with nurserymen's interest in entomological research and in plant quarantines, he will be able to tell of the war's effect on those activities.

The cooperation of state regulatory officials with nurserymen in reducing interstate barriers and simplifying quarantine measures is typified by

the appearance on the program this year of Dr. Carl J. Drake, now serving his second term as chairman of the National Plant Board. For twenty years head of the department of entomology at Iowa State College and state entomologist, he has long been well known to nurserymen of the middle west. He knows the problems in other sections of the country, because he was born at Eagleville, O., July 28, 1885, and received his education in that state and taught there after obtaining his Ph.D. at Ohio State University in 1921. He was connected with Syracuse University and with the Florida and Mississippi experiment stations for short periods before going to Iowa. His report on progress in dealing with plant quarantine matters will be timely.

ENTERTAINMENT PLANS.

Convention goers will find the wild and woolly west atmosphere when they arrive at the Hotel Muehlebach, Kansas City, convention headquarters. The hosts and hostesses will be wearing 10-gallon hats (some of them for the first time). One should not be surprised if he sees on the street, or even in the hotel lobby, men wearing boots and spurs, because Kansas City is an honest-to-goodness cow town. Somehow or other the cattlemen do not seem to be out of place in the carpeted and gilded lobby because, in a way, they are aristocrats.

The entire mezzanine of the hotel



Dr. C. J. Drake.



P. N. Annand.

has been set aside for the convenience and comfort of nurserymen. Focal point will be the Santa Fe Trail Room, which is to be Kansas City's version of the "Packing Shed." This room, which will be decorated with the wild west motif, will contain tables, easy chairs and other features that will enable the nurserymen to relax in cool comfort.

Women are urged to attend the convention and will be well provided for. The Ladies' Auxiliary and hostess committee have completed arrangements for their entertainment Tuesday, Wednesday and Thursday, as outlined.

Nor have the young folks been overlooked. Special features have been arranged for their entertainment and to help them get acquainted with each other early in the meeting.

The high light of the entertainment will be a trip through the famous Country Club district, followed by a barbecue Wednesday evening in the beautiful 10-acre private park of the Chandler nurseries. In spite of the transportation problems which face the local arrangements committee, it is hoped that these features will not have to be given up.

A good attendance is expected at the convention. Those conventions which have been held to date in various parts of the country report good attendance, and the only ones that have been canceled are those which are social in nature and ordinarily have such a large attendance that they would cause traffic congestion. It is felt that the nurserymen are fortunate in this respect because, comparatively speaking, the attendance is not large and the purposes of the meeting are serious and of importance to the welfare of the country.

PROGRAM FOR THE WOMEN.

Plans for the entertainment of woman guests at the A.A.N. convention are just about complete.

For getting acquainted purposes there will be a tea Tuesday afternoon, July 21, at the Muehlebach hotel. Wednesday morning has been reserved for the business meeting of the Ladies' Auxiliary. Wednesday afternoon has been left free so that those who wish may visit beauty parlors or shop. Late Wednesday afternoon the women will join the men in a tour of the Country Club district, after which there will be a barbecue

at the beautiful 10-acre park at Chandler's nursery.

A visit to the Nelson Art Gallery is scheduled for Thursday morning. This institution now houses many works of art which have been sent to this inland city for the duration. It is famous not only for the excellence of its displays, but for the beauty of its grounds as well.

The Country Club Plaza, the business section of the nationally known Country Club district, will come in for its share of attention. Luncheon will be served Thursday noon in the Iris room of the Myron Green restaurant in the Plaza.

Mrs. Chet Marshall, Arlington, Neb., is president of the Ladies' Auxiliary. Mrs. C. A. Chandler is chairman of the local arrangements committee. Mrs. E. Asjes, Jr., Mrs. Stanley McLane and Mrs. Charles Williams, all of Kansas City, and Mrs. Harold Crawford, of Ottawa, will serve with Mrs. Chandler as hostesses at the convention.

HOTEL RESERVATIONS.

The anticipated good attendance at the A.A.N. convention makes it important that hotel reservations be placed early in order to secure the accommodations desired. Headquarters will be at the Hotel Muehlebach, while the Hotel Phillips, just across the street, will take care of the overflow. Both hotels have air-conditioned rooms. Rates at the Hotel Muehlebach are, with bath, for one person from \$3.50 to \$7, and for two persons from \$5 to \$9.

TRADE EXHIBITS.

Excellent facilities have been provided for trade exhibits at the A. A. N. convention. All of the space is on the mezzanine of the Hotel Muehlebach, the headquarters hotel. This space is all air-cooled and air-conditioned and arranged in such a way that those attending meetings must pass by the exhibits.

There are fifteen booths that rent for \$60 each and thirteen renting for \$40 each.

Some good locations are still available and they can be secured by writing either to George Chandler, Chandler Landscape & Floral Co., 101 West Forty-seventh street, Kansas City, Mo., or to Richard P. White, 636 Southern building, Washington, D. C.

TRANSPORTATION.

As a wartime measure the railroads have agreed to operate no special trains, and consequently the arrangements made for the Santa Fe Super-Chief to take A. A. N. convention visitors from Chicago to Kansas City have been changed. But the nurserymen's party will travel together, and William J. Smart, A. A. N. transportation chairman, has nearly fifty reservations now on hand. Instead of the schedule outlined in the special train folder sent to A. A. N. members several weeks ago, the nurserymen's party will travel in cars attached to the Ranger, a Santa Fe streamliner, which will leave Chicago, Sunday, June 19, at 8:15 p. m., and arrive at Kansas City at 7 o'clock the following morning. There will be air-conditioned cars available, with the same accommodations as offered on the Super-Chief with the exception of roomettes. As the train departs later than was planned for the special train, nurserymen will provide their own supper Sunday evening and will engage their own taxicabs at Kansas City. Accordingly, the rail fare and accommodations for the trip will cost approximately \$2.50 less than the fares outlined in the circular members received. The cost varies from \$26.67 for one person in an upper berth to \$32.82 for one person in a compartment. Inasmuch as additional cars must be obtained early if needed, you are urged to send your reservation at once to William J. Smart, A. A. N. transportation chairman, Dundee, Ill.

The wartime regulations will also prevent the use of busses to carry visitors out to the Chandler nurseries for the barbecue, Wednesday evening, July 22. At the present time the local arrangements committee is planning to use private automobiles to carry the visiting nurserymen to the nurseries. That appears a certain arrangement, inasmuch as no restrictions on gasoline are expected to be imposed in July.

The possibility of restrictions on railroad service as wartime needs become greater have caused some members concern in planning for the convention. Edwin J. Stark, A. A. N. president, recently wrote to Charles Williams, chairman of the local arrangements committee: "I feel confident that we shall not have any restrictions on passenger service between this date and the time that the convention is to be held in Kansas

City. The American Association of Nurserymen, with its membership of a few hundred, will not place any burden on the railroads, and I am sure they will not restrict our convention in any way."

As to the importance of the convention, Mr. Stark adds: "I have talked to a number of nurserymen and I really feel we are going to have a very good attendance at Kansas City. A number of problems confront the nursery industry at this time, and practically all of these matters are going

to be discussed in open meetings. Personally, I feel the association is rendering a real service to the membership and believe we should urge everyone to attend this meeting."

Relief from the worry as to gasoline supplies to make possible the attendance of nurserymen near Kansas City by automobile is indicated in a letter to Mr. Williams from Richard P. White, A. A. N. executive secretary, in which he states: "We have pretty definite information that the gasoline rationing plan will not be effective in

the middle west on July 1 as anticipated, but has been held up for administrative reasons. This means that many of the middle western nurserymen will be able to motor to the convention, so that probably we should have a normal attendance. I have been told by the chief of the car use division of the Association of American Railroads that we will have no difficulty in moving our convention crowd to Kansas City by rail. Both of these bits of information are encouraging."

Sixty-seventh A. A. N. Convention

COMPLETE CONVENTION PROGRAM

MONDAY, JULY 20.

- 9:00 A. M. Registration. Mezzanine.
- 9:30 A. M. All-America Rose Selections, Inc. Parlor A.
- 10:00 A. M. Ornamental Growers' Association. Room 4.
- 2:00 P. M. Wholesale Fruit Tree Growers' Association. Room 4.
- 2:00 P. M. National Association of Plant Patent Owners. Room 2.
- 4:00 P. M. American Nurserymen's Protective Association. Room 4.
- 8:00 P. M. Meeting of board of governors, organization, certification of delegates and committee reports. Grand ballroom.

TUESDAY, JULY 21.

- 8:30 A. M. Registration. Mezzanine.
- 9:30 A. M. Opening session. Grand ballroom.
- Call to order.
- Invocation.
- Address of welcome, by Hon. John B. Gage, mayor of Kansas City.
- Response, by Frank S. LaBar, vice-president.
- Announcements of arrangements committee, by Charles Williams, chairman.
- 10:00 A. M. President's address, by Edwin J. Stark.
- 10:30 A. M. Treasurer's report and presentation of 1942-1943 budget, by Frank S. LaBar, treasurer.
- 11:00 A. M. Appointment of temporary committees: Resolutions, credentials and addresses.
- 11:10 A. M. Address, "Kansas City Parks," by Merle Smith, Kansas City, Mo.
- 11:40 A. M. Address, "Priorities and the Nursery Industry," by Hon. M. Clifford Townsend, director, Office of Agricultural War Relations, United States Department of Agriculture.
- 12:30 P. M. Adjournment.
- 2:00 P. M. Club sessions.
- A. For fruit tree growers. Trianon room.
- "New Developments in Fruit Tree Production." Leader, T. J. Talbert, University of Missouri, Columbia.
- "Registered Rootstocks," by H. B. Tukey, New York state agricultural experiment station, Geneva.
- "Dwarfing Stocks," by Thomas J. Maney, Iowa State College, Ames.
- "New Commercial Varieties," by William F. Pickett, Kansas State College, Manhattan.
- "Standardization of Fruit Varieties," by M. J. Dorsey, University of Illinois, Urbana.
- "Value and Place of Hormones in Plant Growth," by A. E. Murneek, Missouri agricultural experiment station, Columbia.
- B. For landscape firms. Grand ballroom.
- Business meeting.
- "Landscaping the Small Property." Leader: Prof. L. R. Quinlan, Kansas State College, Manhattan.
- 3:00 P. M. Women's tea. Tearoom.
- 3:00 P. M. Young folks' entertainment. Santa Fe Trail room.
- 7:00 P. M. Past presidents' banquet. Tearoom.

WEDNESDAY, JULY 22.

- 9:00 A. M. General meeting. Grand ballroom.
- 9:00 A. M. Report of executive secretary, by Richard P. White.
- 9:30 A. M. Report of executive committee, by J. Frank Sneed.
- 10:00 A. M. Review of committee activities during 1941-1942, by vice-president, ex officio. Chairmen of all standing committees will be present to discuss any phase of committee activity during the year.
- 10:00 A. M. Meeting of Ladies' Auxiliary. Tearoom.
- 11:30 A. M. Address, "Freight Transportation," by Warren C. Kendall, chairman, car service division, American Association of Railroads, Washington, D. C.
- 12:30 P. M. Adjournment for luncheon.
- 3:00 P. M. Trip to Swope park via Kansas City boulevard and residential districts, concluding at Chandler's nursery.
- 6:30 P. M. Barbecue, guests of Chandler Landscape & Floral Co.

THURSDAY, JULY 23.

- 9:30 A. M. Women visit the Nelson Art Gallery.
- 9:30 A. M. General business meeting. Grand ballroom.
- 9:30 A. M. Nominations for executive committee members, regions 2, 4 and 6, and at large.
- Nominations for officers, 1942-1943.
- 10:00 A. M. Reports of special committees:
- Government procurement of nursery stock, by Lloyd Moffett.
- Registered rootstock association, by Joel Barnes.
- Camouflage, by William Flemer.
- Emergency transportation, by Charles S. Burr.
- 11:00 A. M. Address, by P. N. Annand, chief, bureau of entomology and plant quarantine, United States Department of Agriculture.
- 11:30 A. M. Address, by Major R. P. Breckenridge, engineer board, United States Army, Fort Belvoir, Va.
- 12:30 P. M. Adjournment for luncheon.
- 2:00 P. M. Address, "Victory Garden Harvest Show Program," by J. W. Johnston, horticultural editor, New York Herald Tribune.
- 3:00 P. M. Club session.
- A. Landscape association.
- "Selling, Credits and Collections." Leader: Prof. Felix Held, Ohio State University, Columbus.
- 7:00 P. M. Annual banquet, Tom Collins, speaker.

FRIDAY, JULY 24.

- 9:30 A. M. Final business session.
- 9:30 A. M. "Work of the National Plant Board," by Dr. Carl J. Drake, Ames, Ia.
- 10:00 A. M. Unfinished business.
- Report of resolutions committee.
- Report of committee on addresses.
- Report of credentials committee.
- Reports of affiliated groups.
- Discussion and adoption of 1942 budget.
- New business.
- Selection of 1943 convention city.
- Election of officers.
- Induction of officers.
- Adjournment sine die.

Fragrance in the Hardy Garden

By C. W. Wood

When a correspondent asked recently for a list of fragrant hardy plants and their culture, suggesting that an article or two would be helpful to American Nurseryman readers, I thought that the task of assembling my notes on the subject in one article of the usual length would be an easy matter. Imagine my surprise, then, when I found that it would take several issues to cover them in their barest form. I am of the opinion that that would be more than the subject justifies; so I have omitted most of the better known plants, such as thymes, savories, mints, etc., and shall confine the remarks to those of lesser reputations.

It so happens that a plant of small charm for the eye often carries a most delectable odor. Thus *Muscari moschatum*, the musk hyacinth, offers little beauty in its purplish flowers, but its musky fragrance, one of the rarest odors in flowers, is a delight in any garden. This is a hardy bulb that I have long known and liked and, although I should not care to have broad expanses of it, I should dislike to pass a spring when its fragrance did not greet me from a sunny corner. Although it has the reputation of being a shy bloomer and often short-lived, I find that it is both constant in flowering and long-lived if given a dry sunny spot where the hose does not reach. Another bulb of early spring which has earned my, and no doubt many another gardener's, friendship by a cheerful disposition and a pleasing fragrance is the spring snowflake, *Leucojum vernum*. Two leuciums, the one mentioned and *L. aestivum* (summer snowflake), seem badly confused in gardens and nurseries. In fact, it took me a long time to find true *L. vernum*, the later-blooming species being supplied in its place. The true thing may be known by its early flowering, almost as early as snowdrops, and by its height of six or eight inches, among other characters. Both bulbs mentioned reproduce by means of offsets and may also be increased from fall-sown seeds.

On the face of the subject, one would think it unnecessary to bring sweet violets into the picture. Their praises have been sung for ages, and, as a consequence, one would naturally think that everyone knew all about them and that every neighborhood nursery had a full selection of kinds. You will be rudely awakened, however, if you start to make a collection, and you will be lucky if you find more than two or three of the most popular varieties. That was my state, at least, a few years ago when I began to make a collection of all the different hardy varieties. I found, first of all, that one had to go to old gardens if he was to find the several kinds of whites and mauves mentioned in old literature. There is no use trying to differentiate them on paper or to attempt to name them. The best that I can do is to urge all who garden with their noses or who have customers of that kind to investigate the hardy sweet violets, knowing that they contain much good material whose praises have not reached general garden literature.

Jumping ahead now from the

flowers of early spring to June—because we must skip daffodils, sweet arabis and many other well known inhabitants of spring gardens if we are to condense the notes into one issue—we come to *hemerocallis*. And they would not be mentioned were it not for the fact that the delightful fragrance of the old yellow day lily, *H. flava*, is being overlooked in the race to possess the newer named varieties. Although many new kinds are sweet-scented, those carrying the blood of *H. fulva*, *H. aurantiaca* and other scentless, or almost so, kinds are apt to inherit the characters of their parents. It would be a crime, in my opinion, to lose the fragrance, "light and fine and a little fruity," of the yellow day lily in our mad scramble for newness.

Another old-time favorite, the gas plant, *Dictamnus albus*, is not used so much in gardens as its merits warrant. It is true, of course, that it may be found in many gardens, often as single specimens, unless the garden is an old one and its owner a lover of fragrant things. But it should be planted in masses to bring out all its beauty of flower

Fumigate

Your Compost Heaps and Soil for Potting
and Seed Flats **This NEW, EASIER WAY**
to Control Most Damping-Off and Weed Seeds

Treating Seed Flat and Potting Soil with LARVACIDE kills most Weed Seeds, along with nematodes and fungi that cause damping-off and other soil diseases.

Soil is treated in bins, deep frames and piles, application being made at foot levels as soil pile is built up. This is easily and rapidly accomplished with the Larvajeator.

Plants grown in LARVACIDE-Treated Soil usually show distinct improvement, sturdier and more vigorous growth. This treatment also cuts hand weeding costs, particularly important when help is scarce.

Write for new edition, just off press, of **HOW TO DO SOIL FUMIGATION.**

Larvacide

is a tear gas fumigant, shipped in liquid form, in cylinders 25-180 lbs. and 1 lb. bottles, each in safety can, 6 or 12 to wooden case. Stocked in major cities.

The Larvajeator measures depth and dosage accurately and makes it easy for one man to treat up to 1000 sq. ft. per hour.



INNIS, SPEIDEN & COMPANY

Established 1816

117 Liberty St., New York

BOSTON • CHICAGO • CINCINNATI • CLEVELAND • OMAHA • PHILADELPHIA

RHODODENDRON HYBRIDS.
Grafted, hardy varieties only.

AZALEA KAEMPFERI HYBRIDS.
Named varieties; the hardiest of all Azaleas for landscape work.

KOSTER'S BLUE SPRUCE. Perfectly shaped; transplanted.

EUROPEAN BEECH. Fine specimens. Also fastigiata, pendula, Riversi.

LILACS. The best collection of choice varieties.

FLOWERING JAPANESE CHERRIES. Three outstanding varieties.

CRAB APPLES. Young, thrifty plants, selected varieties.

LABURNUM VOSSL. Grown in standard form.

BAGATELLE NURSERY

P. O. Huntington Station, L. I., N. Y.

P. M. Koster, Mgr.

Please make request for our catalogue on business stationery.

de WILDE'S RHODO - LAKE NURSERIES

SHILOH, N. J.

RHODODENDRONS,
AZALEAS
AND OTHER
ERICACEOUS PLANTS

ORIENTAL PLANES

All sizes up to 5-inch

Maples, Oaks, Elms, Ginkgos

RICKETT NURSERIES

Successors to Moon's
Morrisville, Pa.

Nursery Stock at
Wholesale Only.



ARTHUR DUMMETT

61 W. Grand St. Mount Vernon, N.Y.

BURR

Leading wholesale source for
Nursery Stock.

Send us your Want List.

C. H. BURR & CO., INC.
Manchester, Conn.

SEEDS

TREE AND SHRUB
PERENNIALS

HERBST BROTHERS

92 Warren St.

New York, N. Y.

and foliage and charm of fragrance. The neighborhood grower could help correct that fault by making a show planting, perhaps using the suggestion of George Ellwanger, a horticultural writer of the preceding generation, when he suggested that it be planted "along your favorite walk with the lemon balm and the anise-scented giant hyssop, so that you may pluck a leaf of them as you pass by." The way it suits me best is in large groups against a dark green background, such as an evergreen hedge. Happily for the creator of landscape pictures, the plant is contented with full exposure to sunshine or in part shade. There is an idea abroad among gardeners that the gas plant resents disturbance, but I do not find that to be markedly so. In fact, I divide my stock every two or three years rather than grow the plants from seeds, because I find that plants grow into money faster that way.

A fragrant flower of summer that I and my customers like especially well is the musk mallow, *Malva moschata*. It has, incidentally, more good qualities than that of a pleasant musky odor. I like it, too, for its long blooming period and for its amiable disposition. The latter allows it to get along in almost any sunny spot, a character much to be desired in the trying climate of this country. Grow it from seeds (it comes in either satiny-white or rose-pink) and plant it among blue flowers or glaucous foliage for most pleasing effects.

At least two bush clematises of my acquaintance, *C. recta* and *C. heracleafolia davidiana*, have a pleasing fragrance to recommend them, in addition to their value as landscape ornaments. The first of these is perhaps too well known both as a garden plant and as a cut flower to need our attention now. *Davidiana* is, however, less often seen, though its bright blue bell-shaped flowers, abundantly produced in late summer, on spreading plants to a height of four feet, and its pronounced spicy fragrance are attractions that most gardeners cannot resist. Try the plant in a small way, if you want to verify that statement. It is easily grown from fall-sown seeds and easily handled in a sunny spot in an alkaline soil.

When I see the way many gardeners abuse the old white plantain

GRAFTED STOCK

From 2 1/4-in. Pots

Ready for delivery

	10	100
<i>Cedrus atlantica glauca</i>	\$4.00	\$35.00
<i>Cornus florida alba plena</i>	3.00	27.50
<i>Cornus florida rubra</i>	3.00	27.50
<i>Ilex opaca femina</i>	3.00	27.50
<i>Ilex opaca howardi</i>	3.00	27.50
<i>Juniperus chinensis neoboriensis</i>	3.00	27.50
<i>Juniperus scopulorum glauca</i>	3.00	27.50
<i>Juniperus squamata</i>	3.00	27.50
<i>Juniperus squamata argenteo-variegata</i>	3.00	27.50
<i>Juniperus squamata meyeri</i>	3.00	27.50
<i>Juniperus virginiana canaerti</i>	3.00	27.50
<i>Juniperus virg. elegantissima</i>	3.00	27.50
<i>Juniperus virginiana glauca</i>	3.00	27.50
<i>Juniperus virginiana globosa</i>	3.00	27.50
<i>Juniperus virginiana keteleeri</i>	3.00	27.50
<i>Juniperus virginiana kosteri</i>	3.00	27.50
<i>Juniperus virginiana schottii</i>	3.00	27.50
<i>Juniperus virginiana pendula</i>	3.00	27.50
<i>Juniperus virg. pyramidalis</i>	3.00	27.50
<i>Juniperus virg. pyramidiformis</i>	3.00	27.50
<i>Juniperus sabina Vonehron</i>	3.00	27.50
<i>Thuja occidentalis douglasii spiralis</i>	2.50	22.50
<i>Thuja oc. elegantissima</i>	2.50	22.50
<i>Thuja occidentalis nigra</i>	2.50	22.50
<i>Thuja oc. rosenthalii</i>	2.50	22.50
<i>Thuja occidentalis wareana (sibirica)</i>	2.50	22.50
<i>Thuja orientalis aurea nana</i>	2.25	20.00
<i>Taxus media brownii</i>	3.00	27.50
<i>Taxus media hatfieldi</i>	3.00	27.50

ROOTED CUTTINGS

From 2 1/4-inch pots

\$11.00 per 100, \$100.00 per 1000.

Ilex crenata bullata
Juniperus depressa plumosa
Retinospora plumosa aurea
Retinospora pisifera aurea
Retinospora pisifera sulphurea
Taxus cuspidata
Taxus media hicksii
Thuja occidentalis vervaeneana
Juniperus excelsa stricta

HESS' NURSERIES

P. O. Box 52

Mountain View, New Jersey

lily, *Hosta plantaginea grandiflora* (*Hosta* or *Funkia subcordata* of some lists), I wonder why they grow it at all. Just because the plant will persist in dense shade, the idea that it demands an absence of sunshine seems to have grown up around it; as a consequence, it is often found relegated to the darkest corners, where it is barely able to produce a sheaf of silky plantainlike leaves and rarely a flower. Give it a fairly open situation, on the other hand, where it receives the morning sun, and a deep rich soil that is not too dry, and it is one of the most attractive plants of late summer, delighting its owner with a long season of showy, waxy white, bell-shaped flowers and a pleasing penetrating orange odor. It is usually propagated by division of the stools, but may be grown from seeds, when available, if sown as soon as ripe.

It would seem unnecessary to call attention to lavender, but careful observation leads me to the conclusion that few gardens in the northern states know it. Inquiry reveals the fact that the plant has the reputation of being tender to our winters. That is no doubt correct in most cases, especially in *Lavandula spica* and *L. stoechas*, neither of which is hardy in my garden, but there are several forms (without names, so far as I know) of *L. vera* that never whimper at even 35 degrees below zero here. As long as there is no way to designate them by name, all one can do is to try the different kinds offered and let winter eliminate the weaklings. In sections where the plant is questionably hardy, a little planning to place it where cold winds cannot reach it will go a long way toward making it thrive. I am convinced from personal experience that neighborhood growers, who now ignore lavender, could add not a little to their sales by offering their customers plants of proved hardiness. Fortunately, that is not difficult after stock is in one's possession, for cuttings of the previous season's growth, taken with a heel of old wood in early spring and inserted in sandy soil in a close frame, are easily rooted.

It may be that early association with costmary has given it a special place in my affections; if so, others must have had the same contact, for I find it a ready seller to local trade. Other than the penetrating, though

pleasing, fragrance of its big leaves, it has little to recommend itself to gardeners, especially now that the practice of using its leaves as bookmarks in Bible or hymnal is no longer followed, for its inconspicuous flowers at the top of tall lanky stems are not particularly ornamental and its spreading habit is not a desirable trait. Despite these shortcomings, fragrance sells the plant to all who garden with their noses. It may be infinitely multiplied by division. It is *Chrysanthemum balsamita* of botanists and *Tanacetum balsamita* of some lists.

Although new-mown hay does not all smell alike and some kinds (sweet clover, for instance) are rather offensive to some noses, anything that has earned the reputation of having the odor of new-mown hay gets attention from gardeners. That is one of the charms of sweet woodruff, *Asperula odorata*, though its ability to produce a cloud of small white flowers over a long season is also in its favor. Among other plants with the same odor, *Thalictrum glaucum* of southern Europe deserves mention. This is one of the better meadow rues, often neglected by nurserymen. In well grown specimens, which are the result of growing them in rich, preferably rather heavy soil, they may grow five feet tall, and they are then a beautiful spectacle in July, when they spread out wide canopies of feathery yellow flowers over blue-gray, fine-cut foliage. Many of the astilbes carry this same fragrance and so would be desirable on that score alone. As my notes do not say which kinds possess this odor and which do not, I shall have to leave that to your trials.

Not many campanulas possess any odor at all, either good or evil, so one is surprised to find any of the family calling attention to their presence by an agreeable fragrance. If you have *Adenophora communis* (*A. liliflora* or *A. fischeri*) in your planting and have not noticed its fragrance, get on the leeward side of it this summer (it blooms in July and August here) and enjoy its sweet perfume. The plant is inclined to spread, it is true, but its happy disposition, an ability to bloom in the heat of summer and pretty blue-purple ladybells, as well as its agreeable odor, give it a value for garden adornment. It is easily grown from

seeds and may also be grown from cuttings in spring.

I cannot close these notes without saying a few words in praise of the holy grass, *Hierochloa odorata*. This is the grass used by the Indians in the making of baskets, which retains its fragrance for years. The literature is full of references to it and gardeners are continually asking for it, but I cannot locate a single source of supply in an American nursery. As the plant grows naturally in moist meadows in the northern states, especially near the Atlantic ocean and around the Great lakes, it should not be difficult to locate stock plants. And I am convinced that a supply would sell readily.

OBITUARY.

Wilbur F. Ilgenfritz.

Wilbur F. Ilgenfritz, for many years president of I. E. Ilgenfritz' Sons Co., Monroe, Mich., died at the family home, at 224 East Elm avenue, early Sunday morning, June 7. Had he lived until June 21 he would have been 84 years old.

Mr. Ilgenfritz, the fourth son of Israel Epley Ilgenfritz and one of twelve children, was born at Monroe, June 21, 1858. His father, a native of York, Pa., had left home early in 1846 for the west, founding the nursery at Monroe in 1847. All but one of his sons followed him into the nursery business.

Wilbur Ilgenfritz was educated in the city's public schools, until he went on the road for the company at



W. F. Ilgenfritz.

1893 1942

We Offer—

FOR SPRING 1942

SHRUBS EVERGREENS
SHADE TREES

APPLE, PEACH, CHERRY AND
PEAR TREES IN ASSORTMENT.

BARBERRY—Green and Red
CALIFORNIA PRIVET

2-YR. ASPARAGUS PLANTS, etc.

Write for trade list.

THE WESTMINSTER NURSERIES
Westminster, Maryland

SHADE TREES

One to three inches

Birch Maples
Elms Oaks
Lindens Poplars

Spaced and well grown

Write Us

JACKSON & PERKINS COMPANY
Newark, New York

LINING-OUT STOCK

Tsuga canadensis, Abies balsamea,
Picea rubra, Pinus Strobus, Acer
rubrum and saccharum; Betula lenta,
lutea, papyrifera and populifolia;
Fagus americana, Fraxinus americana,
Prunus pennsylvanica and serotina
and many other trees and shrubs.

L. E. Williams Nursery Co.
P. O. Box 147, Exeter, N. H.

"A friendly, efficient sales service"

E. D. ROBINSON
SALES AGENT
38 So. Elm St. P. O. Box 285
WALLINGFORD, CONN.

Representing
Adams Nursery, Inc.
Bristol Nurseries, Inc.
Barnes Brothers Nursery Co., Inc.
North-Eastern Forestry Co., Inc.
A. N. Pierson, Inc.

A complete line of well grown hardy plant material
Evergreens and Lining-out Stock

EVERGREENS — PEONIES — PHLOX
— POPPIES — AND OTHER SEA-
SONABLE STOCK

LAKE'S
SHENANDOAH NURSERIES
Shenandoah, Iowa

"We solicit your inquiries on nursery
stock in general."

PRIVET and BERBERIS

Splendid Stock

Write for Special Quotations

LESTER C. LOVETT
MILFORD DELAWARE

Please mention the
AMERICAN NURSERYMAN
when writing advertisers

the age of 19 years. Two years later he became a member of the firm with his brothers, Charles and Theodore, and the firm became I. E. Ilgenfritz' Sons Co.

Mr. Ilgenfritz married Miss Alice Venning, daughter of Dr. James Venning, a Methodist minister, March 7, 1893. Mrs. Ilgenfritz survives, with one son, Major James I. E. Ilgenfritz, now stationed at Camp Beauregard, La. Major Ilgenfritz flew home for the services.

For many years a member of various Masonic organizations, Mr. Ilgenfritz was never an officer. His retiring disposition and his love of home life kept him from seeking personal honors. However, his prominence in the nursery field brought him the presidency of the Michigan Nurserymen's Association. In 1938 he was made honorary president and presented a gavel in token of his past services to the association.

Two sisters, in addition to his wife and son, survive. They are Mrs. R. E. Doolittle, Brooklyn, N. Y., and Miss Katherine Ilgenfritz. There are two grandchildren, Wilbur F. II, and James I. E. II.

Mrs. Nettie M. Huntington.

Mrs. Nettie M. Huntington, proprietor of the Ralph E. Huntington Nursery, Painesville, O., since the death of her husband, R. E. Huntington, in 1929, died May 25 at her home. She was 64.

J. A. Jamison.

J. A. Jamison, retired nurseryman, Nashville, Tenn., died May 24 at the age of 75, after a year's illness. He had lived at Nashville for the past seventeen years, going there from McEwen, where he had made his home for eleven years. Surviving are his widow, two daughters and a son.

L. B. ROSS is now associated with the Mill Valley Nurseries, 234 Sycamore avenue, Mill Valley, Cal.

ALBERT W. WADLEY is now operating Wendmere Nurseries, Inc., Bound Brook, N. J., and Bronxville Nurseries, Inc., Yonkers, N. Y., as the Wadley Nurseries.

INCREASE in both retail and wholesale sales this spring is reported by the Sherman Nursery Co., Charles City, Ia. The firm's customers also apparently fared well, since collections have been good, too.

BUY EVERGREEN LINERS EARLY THIS YEAR

The supply of good evergreen seeds has been limited for the past few seasons. Prudent buyers will place orders early for Spring 1942 plantings.

We appreciate the fine business we have received from our many good customers this past spring, and we want to take care of these good friends another season.

SHERMAN NURSERY CO.
Charles City, Iowa

RAFFIA FOR BUDDING and TYING

We can offer for immediate shipment GENUINE MADAGASCAR RAFFIA as well as "CONGO" RAFFIA.

Thomas B. Meehan Co.
DRESHER, PA.

BOBBINK & ATKINS

Rhododendron Hybrids

Climbing Vines

Azalea Mollis

Cotoneasters

East Rutherford, New Jersey

Evergreens

Barberry

Privet

Write for wholesale price list.

GARDNER'S NURSERIES

Rocky Hill, Conn.

KOSTER COMPANY, INC.

Lining-out Stock
of Top Quality

BRIDGETON, N. J.

Write for catalogue.

PRINCETON NURSERIES

of PRINCETON, N. J.

SUPERIOR

Hardy Ornamentals

This Business of Ours

Reflections on the Progress and Problems of Nurserymen

By Ernest Hemming

PLANT KNOWLEDGE AND LANDSCAPE ART.

In looking backward to apprenticeship days or the period when we were supposed to be getting our horticultural education, it does seem as if the students of the present day could be helped by our experience.

Take the subject of Latin. While it is essential for the practical horticulturist to know enough to make one familiar with the meaning of plant names, he does not necessarily have to be able to translate Horace or even learn the declensions.

If he learns to count up to ten in that language, know the Latin equivalent of the colors, the margins and shapes of leaves, and more or less familiarize himself with the glossary at the end of Gray's Manual of Botany, all of which can be acquired in a short period, he has all the Latin he needs. Then such names as *Acer polymorphum atropurpureum* become as full of meaning as baseball lingo. With a knowledge of nomenclature of plants, all about them is readily accessible in the numerous cyclopedias on the subject.

The more one studies old landscape plantings, especially those done by the local nurseryman or landscape gardener on small grounds, around the suburban homes of the cities, the more one is convinced that lack of plant knowledge—or as it is called in the college classroom "landscape material"—is the greatest factor in poor landscape planting.

It has been truly said that landscape gardening is the supreme art because it includes the dimension of time as well as length, breadth and depth.

It is this dimension of time that reveals the true landscape artist. Almost anyone can arrange plants for an immediate effect, but to know plants well enough to select plants that will thrive in a particular position and not grow out of proportion in a few years requires a good craftsman.

So many of the plants we use for base plantings or groups in restricted

areas, such as the *chamaecyparis*, *abies*, *picea*, *tsuga*, *cryptomeria*, etc., are rapid-growing forest trees in their native habitats and are only at their best grown as solitaires to bring out their full symmetrical beauty in landscape work. True, there are dwarf horticultural forms that are an exception to the above statement.

Most goods are at their best when sold or used on the job, but in the case of the nurseryman they are usually at their poorest so that their value is largely potential. There is another angle to be considered when discussing the subject and that is the attitude of the customer. It is a curious thing that thoughts of planting bring thoughts of death; at least, the average customer usually says, "I will not live to see that small tree or plant grow up," and he is willing to sacrifice the future for immediate effect, which the nurseryman is quite willing to give him. Perhaps that is the main reason we see so many ill-placed plants and poor landscape jobs. It may not, after all, be lack of knowledge on the part of the planter, but rather the leaving out of the dimension of time in the landscape picture.

E. H.

BERBERIS VERRUCULOSA.

One of the smallest of the evergreen barberries is *Berberis verruculosa*, the warty barberry. This dense shrub with stiff spreading or somewhat drooping branches attains a height of about three feet under usual conditions. It is said to attain a height of five feet, but it is seldom

that specimens are seen that are that large. The twigs are spiny and warty.

Berberis verruculosa has been in the trade for many years, having been introduced from west China in the early part of the present century. One of the most attractive features of this small plant is the small, shining leaves, that are dark green above and white beneath and have rolled margins. The leaves are spiny, resembling somewhat those of a holly, but smaller. The foliage takes on a rich bronze color in late fall and winter.

Small, yellow, slightly fragrant flowers appear in late April to mid-May and are followed by violet-black fruits, usually sparingly produced.

The warty barberry does best in a good well drained soil and a sunny or partly shady situation. It is said to be hardy in zone 5, the same as *Berberis julianae* and *Berberis trianthophora*, but from observations it seems to be less reliable, in the midwest at least, than either of the two species mentioned above. Pests are not troublesome. Propagation is by seeds or cuttings.

Berberis verruculosa makes a fine foundation and rock garden plant and a splendid low hedge, needing little or no clipping. It is reported not to stand the hot climate of some of the southern states well. L. C. C.

MICHIGAN NOTES.

President Harold Paul called a meeting of the executive committee of the Michigan Association of Nurserymen at Lansing, June 12, to plan for the summer meeting, July 29 and 30, at East Lansing.

Robert Cameron, for some years in charge of the Detroit office of I. E. Ilgenfritz' Sons Co., is now lieutenant colonel in the 182nd field artillery, at Rolla, Mo. Major James I. E. Ilgenfritz visited his home at Monroe, in May; he is now with



No. 6 Model Priced from \$75

KEMP Power SOIL SHREDDERS

STOP LOSSES

Save valuable Sod and Manure

Hand sifting screens out lumps of sod and manure that are worth money to you. But when you prepare compost with the KEMP Power Soil Shredder you not only save up to 75% of the labor time but you shred all sod and manure and use it without waste. It's all done in one quick operation and is set for any texture you desire.

You can buy the right size KEMP machine for your needs — from 2 to 20 cu. yds. per hour capacity. Prices from \$75 up.

CUT AND SEND

KEMP MANUFACTURING CO.
Dept. AN-622, 1927 E. 20th St., Erie, Pa.

Please forward the complete story on the KEMP Power Soil Shredder.

Name

Firm Name

Address

City..... State.....

headquarters squadron, 67th observation group, Camp Beauregard, La.

Ralph I. Coryell, as city commissioner of Birmingham, attended the recent war transportation conference of Michigan mayors called by Governor Van Wagener.

NEWARK ROSE FESTIVAL.

Sunday, June 14, the annual festival of roses at Newark, N. Y., officially opened, with a program in the garden of Jackson & Perkins Co. by Mary Margaret McBride, famed woman radio commentator, and the Rose City Choral Society.

The festival program, which will last until July 5, will be highlighted by the Army-Navy relief days, June 20 and 21. The proceeds from the Kiddie Carnival and the "Moonlight and Roses" dance, as well as those received at the gardens of Jackson & Perkins Co. on the two days when admissions will be charged, will be credited to Wayne county's quota for Army-Navy relief.

A feature event of the dance will be the choosing of the 1942 queen of the rose festival. The winner of this contest will receive a screen test in the gardens of Jackson & Perkins Co. on the following day.

RICKERT ADDS TO STAFF.

Constantly working toward his goal to have the best organized and most complete nursery in the east, H. D. Rickert, of Rickert Nurseries, Morrisville, Pa., has made some additions to the personnel of his company.

Arie Jan Radder, formerly of New London, Conn., and more recently with Bagatelle Nurseries, is superintendent of all outside operations—growing, propagating and digging.

O. Lindsay Clarkson, formerly with Lovett's and more recently wholesale sales manager at the Kelsey-Highlands Nursery, East Boxford, Mass., is in charge of the wholesale department.

J. Miles Burford, formerly of Bobbink & Atkins, is in charge of the landscape department. John E. Coykendall is also in the landscape department.

Clarence H. Meys, formerly of Cromwell, Conn., takes over the retail sales through the plant mart.

All these men are well known to the nursery trade, and their association with the progressive-minded

Mr. Rickert should prove mutually profitable.

The Rickert Nurseries have a large assortment of shade trees and are producing large quantities of all the better varieties of shrubs and evergreens, including the new Moon's columnar yew, *Taxus cuspidata columnaris*.

Rickert Nurseries took over in 1938 the Moon's Nurseries, one of the oldest in the United States, founded in 1767.

WELCOME TO BREEZE HILL.

I think gas and tires will prevent as many visits to Breeze Hill as we should otherwise expect, but none the less I wish you could give notice that we are ready to welcome warmly any who care to stop off in Harrisburg and see coming into bloom a great rose trial ground, which is only one feature of a large and well kept garden which looks toward new things all the time.

We really began our bloom beauty in midwinter with an unusual display of *Helleborus niger*. The daffodil showing covering more than 200 varieties was interesting, as was the tail end of the hyacinth exhibition following the receipt from Holland four years ago of all the named varieties known before that country was tramped on. Many thousands of tulips have done their best, and the biennials and perennials are right along now, preceding the opening rose show, including well over a half-hundred varieties yet under number, but showing great promise.

Breeze Hill is not hard to get to by anyone who is coming through Harrisburg, and the Chicago trains all stop here, with an opportunity to reach Breeze Hill within fifteen minutes from the station. Without needing any appointments or ringing any bells or going through any fuss, we open to our friends who love flowers a great collection blooming in this extraordinary season, the like of which I have never known. With more than 300 genera and over 1,200 species planted, we are sure to have something to see even beyond the more than 800 varieties and species of the rose family. J. Horace McFarland.

A. H. HILL and L. L. Kumlien, of the D. Hill Nursery Co., Dundee, Ill., are on a two weeks' trip in the east.

TAXUS

cuspidata, brevifolia, media, capitata, hicksi, aurea repandens

in medium and large sizes

Also Boxwoods and
Juniperus pfitzeriana

Ask for price list

W. A. Natorp Co.

4400 Reading Rd.
Cincinnati, Ohio

MOUNT ARBOR NURSERIES

E. S. Welch, Pres. — Est. 1875 — Shennels, Iowa
— Wholesale Only —

"One of America's Foremost Nurseries"

1942 — 1943

FRUIT TREE SEEDLINGS — Washington-grown

APPLE — MANALIS — NYRODALAN — PEAR, Bartlett

ROSES — California-grown — Winter and Spring, 1943
LARGE ASSORTMENT OF THE BEST VARIETIES

We are large growers of FRUIT TREES, SMALL FRUITS,
ORNAMENTAL TREES, SHRUBS, EVERGREENS, VINES
and PERENNIALS. Send list of wants for prices.

Ask for our complete FALL TRADE LIST, ready in September. A COMPLETE line of General Nursery Stock.

EVERGREENS

Fine assortment of the best
types of B&B Evergreens.

HOLTON & HUNKEL CO.

Milwaukee, Wis.

Nursery at Brown Deer, Wis.



EVERGREENS

For Seventy-eight Years
Growers of Quality Evergreens
Lining-out Stock a Specialty
Write for Trade List

EVERGREEN NURSERY CO.
Established 1864 — STURGEON BAY, WIS.

HILL'S EVERGREENS

Complete assortment of lining-out sizes
Also larger grades for landscaping
Send for our wholesale catalogue

D. HILL NURSERY CO.
EVERGREEN SPECIALISTS
Largest Growers in America
Box 402 DUNDEE, ILLINOIS



Wholesale growers of the best
Ornamental Evergreens,
Deciduous Trees,
Shrubs and Roses.

Write for our current trade list.

THE KALLAY BROTHERS CO.
Painesville, Ohio

Diseases of Trees

Gleanings from the Latest Reports of Scientific Research

By Leo R. Tebon

CYTOSPORA CANKER OF ITALIAN CYPRESS.

In 1928 property owners in two California coastal cities, Berkeley and San Diego, reported that specimens of the columnar Italian cypress, *Cupressus sempervirens stricta*, were being attacked by a disease. They submitted samples to the federal division of forest pathology, and the disease was at that time diagnosed as being caused by a fungus of the kind known as *cytospora*.

In the fourteen years that have elapsed since it was first reported, this disease has become increasingly prevalent in towns along the southern and central California coast and now is known to extend coastwise from San Diego to San Francisco. In some places it has assumed serious proportions, taking heavy toll of the columnar Italian cypress. It has, as a consequence, been investigated by Dr. George A. Zentmeyer, working at the University of California's division of plant pathology laboratories, whose report gives the following facts regarding the disease.

Although extensively distributed along the southern portion of the California coast, the disease ranges inland only through a narrow belt usually not more than four or five miles deep. Under natural conditions it infects chiefly columnar Italian cypress. However, it does also attack horizontal Italian cypress, *C. sempervirens horizontalis*; Monterey cypress, *C. macrocarpa*, and Arizona cypress, *C. glabra*. As the horizontal variety of Italian cypress is grown but little in California, the disease is of little significance on it. The native southwestern species—the Monterey and Arizona cypresses—though attacked, appear definitely resistant and are scarcely injured. On Monterey cypress, in fact, the disease seems to follow injury to branch tips by fire, salt spray or wind; it forms limited lesions on these parts and extends only slowly down the branches.

On attacked trees the first sign of the presence of the disease is the ap-

pearance of yellow-green foliage on the attacked branches. This foliage grows yellower, finally turns brown and persists on the branches some time after it has died. The dead, brown branches appear as flags that signal the presence of the disease.

On young branches the attack of the fungus produces smooth, reddish-brown cankers, which cause a slight constriction of the branch and are accompanied by a small abnormal resin flow. On older branches, at the place of attack, the bark becomes cracked and distorted, and there is an increased resin flow. Wherever cankers occur, the fungus produces its sporulating structures within the bark, and these structures become evident as minute pustules which thickly dot the area of the canker.

The destructiveness of the disease may be indicated by the case of a single columnar Italian cypress about twenty-five feet tall. On it were found several large trunk cankers and thirty branch cankers. As a result of artificial inoculation, trees up to ten feet high have died within ten months. Trees up to thirty feet tall and six inches in diameter have succumbed within a year after having become infected naturally. However, the course of the disease is not always so rapid. Young trees, those up to 5 years old, have never been found naturally infected, possibly because their rapid, vigorous growth protects them. Even on older trees the canker is more destructive if the trees have been weakened in some way.

In a small area one-half mile square, located north of Berkeley, the columnar Italian cypress trees were watched from 1936 to 1938. In the beginning there were sixty-two trees in the area. In 1936 thirty-two of them were diseased. By 1938 twenty trees had been removed because of the damage done to them by the canker and twenty-nine more trees were diseased.

By means of laboratory experiments, it has definitely been established that the fungus first found in connection with the Italian cy-

press canker is the cause of the disease. The fungus has been identified as belonging to the species known as *Cytospora cenisia* and, because it has certain distinguishing characteristics, is to be known as *form littoralis*, in reference to its occurrence along the coast. It grows best at a temperature of about 66 degrees Fahrenheit and is rather strictly limited by a low temperature of 33 degrees and a high temperature of 77 degrees. Its response to temperature correlates well with the temperatures of localities in which it occurs, as well as those from which it is absent. At San Diego and San Francisco, where it is destructive, only 133 and 104 hours, respectively, occur per year when the temperature is not within the growth range of the fungus. At Los Angeles and San Bernardino, places in which the disease does not occur, there are 737 and 1,848 hours, respectively, per year when the temperature is not within the growth range of the fungus.

Thorough spraying of a tree with such dense foliage as that of the columnar Italian cypress is extremely difficult. Consequently, other preventive measures are more to be relied upon. Wounding of the tree should be avoided. Pruning cuts should be protected with asphalt paint, linseed oil or Bordeaux mixture paint. Branches shading out should be removed to prevent the disease from entering through them. In trees in which the disease has become established, the branches bearing the cankers should be cut off at least six inches below the last sign of the canker, and the wound should, of course, be protected. When the main trunk bears well developed cankers, the safe procedure is the removal and burning of the entire tree—to prevent spread of the infection to other trees. Local spread of the disease is apparently largely traceable to dissemination of the spores of the fungus on pruning tools, to washing and splashing in rain, fog and dew and, to some extent, to other natural agencies.

Over wide distances, the disease apparently has been carried by diseased nursery stock. On this account, close watch should be kept of nursery stock in disease-free districts, and when any instance of the disease is found, it should at once be eradicated.

L. R. T.

HOBBS

PEACH, Leading Varieties.

ELM, American, 8 to 10 ft. up to 2½-in.

MAPLE, Norway, 8 to 10 ft. up to 5-in.

WILLOW, Thurlow, 8 to 10 ft. up to 3½-in.

Large stock of Evergreens up to 5 to 6 ft.

Juniper, Pfitzer, 1200 3 to 5 ft.

Shrubs, Roses, etc.

C. M. Hobbs & Sons, Inc.

Bridgeport, Indiana

Oldest and Largest Nursery in Indiana
Established 1875

**SHRUBS, EVERGREENS, FOREST
AND SHADE TREES, VINES AND
CREEPERS, NATIVE PLANTS**

Write for Trade List

FOREST NURSERY CO., INC.

J. R. Boyd, Pres. McMinnville, Tenn.

Lining-out Evergreens

Good assortment of standard varieties.
Price list on request.

SCOTCH GROVE NURSERY

SCOTCH GROVE, IOWA

NORTHERN-GROWN NURSERY STOCK

Evergreen Liners — Specimen Evergreens, B&B — Hardy Fruit Trees — Hardy Apple Seedlings — Ornamental Shrubs — Lining-out Shrubs, Trees and Vines. Write for price list.

J. V. BAILEY NURSERIES

Daytons Bluff Sta. St. Paul, Minn.

EVERGREENS

Liners and Specimens

SNEED NURSERY CO.

P. O. Box 798, Oklahoma City, Okla.

BURTON'S

HEADQUARTERS FOR
**EVERGREEN GRAFTS, TRANSPLANTED
EVERGREENS, SHRUB LINERS.**
Write!
RARE ITEMS YOU DO NOT
FIND IN MOST LISTS!

HILLTOP NURSERIES
CASTOWN, OHIO

Hardy Pecan Trees. Grafted
Black Walnut. Heartnut
Trees. Budded varieties of
native Persimmon. Sweet
Cherry Trees.

Write for price list.
44 years growing trees.

J. F. JONES NURSERIES
Dept. T-142 Lancaster, Pa.

**Pronouncing Dictionary**

of Plant Names and Botanical Terms

64 pages, 3000 names, **25c** per copy

AMERICAN NURSERYMAN

506 S. Dearborn St. Chicago, Ill.

ON THE CALENDAR.

[Association secretaries are invited to supply dates and places of coming meetings as soon as they are set.]

July 9 to 11, West Virginia Nurserymen's Association.

July 21 to 24, American Association of Nurserymen, annual convention, Hotel Muehlebach, Kansas City, Mo.

July 22 to 24, North Carolina Association of Nurserymen, annual meeting, University of North Carolina, Raleigh.

July 29 and 30, Michigan Association of Nurserymen, Michigan State College, East Lansing.

August (first week), Oklahoma State Nurserymen's Association.

August 5, Wisconsin Nurserymen's Association, Holton & Hunkel Co., Brown Deer.

August 12 and 13, Southern Nurserymen's Association, annual meeting.

August 18 to 20, National Association of Gardeners, Lord Baltimore hotel, Baltimore, Md.

August 19 and 20, Texas Association of Nurserymen, annual meeting, Tyler.

September 1, Western Pennsylvania Nurserymen's Association, Pittsburgh.

September 15, Nebraska Nurserymen's Association, Harrison Nursery Co., York.

September 24 to 26, California Association of Nurserymen, annual meeting, Sacramento.

December 8 and 9, 1942, Minnesota State Nurserymen's Association, Radisson hotel, Minneapolis.

January 5 to 7, 1943, Western Association of Nurserymen, Kansas City, Mo.

January 12 to 14, Illinois State Nurserymen's Association, La Salle hotel, Chicago.

January 21 and 22, Ohio Nurserymen's Association, Deshler Wallick hotel, Columbus, following short course at Ohio State University, January 18 to 20.

SET IOWA DATE.

The date of July 10 has been set for the summer meeting of the Iowa Nurserymen's Association, to be held at Charles City, the Sherman Nursery Co. acting as host. Ample rainfall early this month put the nursery stock in fine condition. Announcement of the details of the program will appear in the next issue.

ST. LOUIS GROUP TO MEET.

The Landscape and Nurserymen's Association of Greater St. Louis will meet June 22 at the establishment of the Sanders Nursery Co. at Allentown, just off highway 66, with John Sanders as host. All members and their families are expected to attend the outdoor afternoon meeting, as a good time is in store. Prospective members are also invited. It has been suggested that carload groups be arranged, rather than have individuals travel in their own cars.

CONTRACT NOW!

... For ...

Fall '42 and Spring '43

Raspberry Plants

Red Lake Currant

Rhubarb

MacDonald—Ruby—Canada Red

America Plum Stocks

Northern Apple Stocks

Forest Tree Seedlings

Ash—American Elm—Chinese Elm

ANDREWS NURSERY CO.

FARIBAULT,

MINN.

VERHALENS

Are growing Texas Roses of
Quality for the new nursery
season.

Write for list of varieties.

EVERGREENS

BOXWOOD — SHRUBS

VERHALEN NURSERY COMPANY

Scottsville, Texas

Wholesale Only

WILLIS NURSERY CO.

Wholesale Nurserymen

Ottawa, Kansas

SMALL FRUIT PLANTS

Evergreens—Shrubs

Lining-out Stock

Send for Complete Trade List

W. N. SCARFF'S SONS

New Carlisle, O.

Wholesale Growers of

Grapevines, Currants, Gooseberries,

Blackberries and Raspberries

Let us quote on your requirements

FOSTER NURSERY COMPANY, INC.

69 Orchard St.

Fredonia, N. Y.

PEACH PITs

Our Pits Compare Favorably
With the Best

HOGANSVILLE NURSERIES

HOGANSVILLE, GEORGIA

HERBS

Pot-grown plants; over a hundred varieties.
Dried Herbs for Flavoring and Fragrance.

Other plants of unusual character and
with the charm of old-time gardens.
New Catalogue sent on receipt of 10 cents.

WEATHERED OAK HERB FARM, INC.

Bradley Hills, Bethesda, Maryland

Oregon Spring Meeting

The annual spring meeting of the Oregon Association of Nurserymen was held at the Oregon State College, Corvallis, May 20, and arrangements were made by a committee of the experiment station staff and Armin Doerner, president of the association. Because of the labor shortage and travel difficulties, the program was confined to a one-day session.

The first part of the day's schedule was given over to a short meeting of the advisory board, with President Doerner and Secretary Samuel J. Rich in charge. A number of routine items were disposed of, and some discussion took place regarding the labor situation, camouflage, plant quarantines, legislation and other topics. A resolution was adopted conveying the sympathies of the association in the untimely death of Prof. W. S. Brown, for twenty-two years head of the department of horticulture at Oregon State College.

At the conclusion of the board session, the meeting was turned over to the experiment station staff. Prof. G. R. Hyslop, head of the division of plant industries, made the opening talk, pointing out some of the difficulties being encountered in carrying on the research program during the war period. Commenting on the status of plant quarantine regulations, he said that while there is a tendency for more leniency in the application of plant quarantines, the Pacific northwest needs to remain on guard against the introduction of new pests. Its success within recent years is due, in a large measure, to the fact that its nursery stocks have been kept comparatively free from diseases and pests.

The subject of "Azalea Flower Spot" was discussed by Dr. F. P. McWhorter. He described the disease and pointed out the seriousness of it in the areas where it has occurred. He reported that no evidence of the disease had been found in the Pacific northwest, but cautioned nurserymen regarding the importation of azalea stocks from infested regions. Apparently the spread of the disease can be largely attributed to the moving of large

plants without elimination of the surface soil. There is much less danger of spread in the case of young azaleas that have not reached the blooming stage. Attempts to control the disease through the agency of sprays have, thus far, failed.

The Oregon state department of agriculture was represented by Charles A. Cole, who showed several reels of colored motion pictures, depicting various phases of Oregon's nursery industry. These pictures were produced under the direction of the state department.

Spray materials and their availability under wartime conditions were discussed by Dr. J. A. Milbrath. While it is impossible to predict from day to day what the situation will be, it is quite certain that some spray materials will be difficult to obtain. Rotenone, for example, will be practically unobtainable after present supplies are exhausted. Sulphur and copper will probably be available for real needs. Arsenic is scarce, but sufficient amounts should be obtainable. Nicotine should be available, since other sources of nicotinic acid are being used. The following chemicals should be available, although no one knows when some might be taken off the market: Petroleum oils, DN powders, lime, pyrethrum, inorganic mercurials, carbon disulphide, cyanide, organic mercurials, methyl bromide, blood albumin, fluorine and zinc sulphate. The following are practically unobtainable: Carbon tetrachloride, ethylene dichloride, formaldehyde, paradichlorobenzene and chloropicrin.

During the noon hour a luncheon was held at the Hotel Benton, in Corvallis. The speaker for this oc-

casian was Dr. U. G. Dubach, dean of men at Oregon State College. He gave an interesting talk dealing with various phases of international relations.

A portion of the afternoon was spent at the new fumigatorium recently completed. This plant, designed for research in fumigation, is located a short distance from the main college campus, where about three acres of land are available for the testing of treated plants. The fumigatorium was made possible by a special legislative grant obtained through the efforts of the nurserymen at the last session of the Oregon legislature. Joe Shuh, entomologist,



SHERWOOD NURSERY CO.
EVERGREENS - Propagators & Growers
141 S. E. 95th Avenue PORTLAND, ORE.

Leading
Evergreen Propagators
of the
Pacific Coast.

MILTON NURSERY CO.

A. Miller & Sons, Incorporators
MILTON-Since 1878-OREGON

OUR SPECIALTIES

Birches—Flowering Cherries, Crabs and Plums—Chinese Elm—Hawthorns—Lilacs—Lindens—Flowering and Globe Locusts—Columnar, Globe, Norway and Schwedler Maples—Mountain Ash—Oregon Grape—Oriental Plane—Willows.

FRUIT TREE SEEDLINGS

Send us your Want List for Quotations. Combination Carloads to Eastern distributing points at minimum freight cost.

We offer a Complete Line of

FRUIT and NUT TREES
SHADE and FLOWERING TREES
ROSES and SMALL FRUITS
Guaranteed Quality

Carlton trees are expertly grown on new, clean land, liberally graded, carefully handled, packed and shipped to arrive in perfect growing condition. We guarantee 100% Satisfaction.

Write for Price List.
Send Want List for special quotations before you buy.

CARLTON NURSERY CO.
Carlton (Since 1890) Oregon
(Wholesalers for a Half-century)

California Field-grown
ROSEBUSHES
Dependable
Howard Rose Co.
HEMET, CALIFORNIA



explained the workings of the plant and took the members through the various trial plots.

A second field trip was made to the college farms, where the nurserymen were shown the work being done on virus troubles of fruit and ornamental prunus stocks. Dr. S. M. Zeller and Dr. J. A. Milbrath were in charge of this demonstration. The specimens on trial demonstrated quite clearly the relationship between certain virus troubles of prunus and brought out the importance of careful bud selection in eliminating these troubles from nursery stocks.

The last item on the program took the members through the new college gardens on the campus. These gardens contain large collections of irises, peonies and roses, the stock donated by various members of the association. Henry Hartman.

MCGILL'S ADVANCE LIST.

Sending out the advance price list of A. McGill & Son, Fairview, Ore., for the season 1942-1943 in the latter part of May, Wayne E. McGill accompanied it with a letter to customers expressing his belief that present conditions warrant early consideration of needs for the coming year. He states: "The nursery business should be good, and if we all will work with the changing times and prepare for the future, we can go a long way towards preserving our organization and help win the war at the same time." While spring came rather late in Oregon, things are growing well now, and a good supply of stock is expected. Prices are changed little from last year's.

Frank Donovan will cover the eastern territory this year, but Wayne McGill expects to attend the Kansas City convention in July.

E. DERING, of Peterson & Dering, Scappoose, Ore., is in the east on his annual sales trip. He expects to attend the A. A. N. convention at Kansas City in July.

THE partnership of Dan B. Milliken and Maurice C. Peairs in the Milliken Nurseries, 456 West Foothill boulevard, Claremont, Cal., has been dissolved, and Mr. Peairs has bought Mr. Milliken's interest. For the time being, the firm name will be unchanged.

PORTLAND WHOLESALE NURSERY CO.

306 S. E. 12th AVENUE Avery H. Steinmetz PORTLAND, OREGON

Quality Stock

CONIFERS AND BROAD-LEAVED
EVERGREENS
SHADE AND FLOWERING TREES
FRUIT TREE SEEDLINGS
FRUIT TREES
DECIDUOUS SHRUBS
VINES AND BULBS
PORTLAND ROSES

TRANSPORTATION FACILITIES may be limited next Winter. In case of such difficulty, orders booked early will naturally be given preference.

If interested in TULIP BULBS (Oregon-grown) for August delivery, or **FORCING AZALEAS** for Fall shipment, we will gladly quote you.

Write for our Catalog

OREGON'S BEST SOURCE OF GOOD ROSES

is

PETERSON & DERING, INC.

Wholesale Rose Growers
Scappoose, Oregon
1942-43 List Now Ready.

J. A. COX, formerly secretary of the Southern California Nurserymen's Association, is now associated with the American Way Gold Medal Bedding Plant Co., Los Angeles, as a salesman.

THE Hobart Nursery, 203 North Victory boulevard, Burbank, Cal., has been purchased by Roy Chamberlain, owner of Chamberlain's Garden Supply Co. The new manager is J. Friberg.

EXHIBITORS at the show of the San Fernando Valley Horticultural Society, at Van Nuys, Cal., May 23 and 24, included the Armstrong Nurseries, whose valley establishment is at North Hollywood, and the Green Arrow Nurseries, Van Nuys, in combination with the Van Nuys Water Gardens.

C. BERT MILLER, of the Milton Nursery Co., Milton, Ore., and Mrs. Miller left recently by automobile for the east and middle west on a business trip that will last until mid-August. They expect to visit thirty-five states and attend the convention of the American Association of Nurserymen at Kansas City, Mo., in July.

Weeds are going.
Trees are growing.
A new season is on the way.

Advance Price List
for
Fall 1942 and Spring 1943
now ready.

If not received, drop a
card for your copy.

**GOOD WESTERN-GROWN
NURSERY STOCK.**

A. MCGILL & SON
Fairview, Oregon

A Complete Line of OREGON-GROWN NURSERY STOCK

DOTY & DOERNER, INC.
6691 S. W. Capitol Highway
Portland, Oregon

Headquarters for . . .

Fruit and Shade trees with vigorous
roots and sturdy stems.
Flowering trees, Weeping trees.
Shrubs, Roses, Small fruits.

Catalogue on request

RICH & SONS NURSERY
Route 4 Hillsboro, Oregon

LEADING GROWERS of

CUTLEAF WEEPING BIRCH,
Schwedleri and Norway Maple,
Fine 2 and 3-year stock.
Also Hawthorn, Crab, Flowering Cherry and Pink-
flowering Locust.

List ready in September.

MOTZ BROS. NURSERIES
P. O. BOX 42, Grano, Ore.

Help Wanted!

Skilled help is always a problem. The situation is acute now and threatens to continue to be serious even after the war.

Nurserymen and others working in the different branches of horticulture are committed to an all-out war effort. Those of us who have not been called upon to serve in the armed forces owe it to the nation to do our jobs better than ever and to contribute additional services as air-raid wardens, Red Cross workers, auxiliary policemen, firemen and the like.

To maintain a practical national balance, to keep up morale and to help pay the tax bills, we must not forget the jobs which are ours now and the businesses which will resume and expand when hostilities cease. We are making a great mistake if we neglect to plan beyond the present and if we do not take the necessary steps to insure future prosperity. Neglecting this, we can expect a reconstruction period which will be filled with prolonged and painful readjustments.

Those of you who have developed businesses and organizations on sound foundations and who see the need of your services to bring happiness to others in this war-torn period will continue to find ways and means of furnishing this service to the public, your employees and yourselves. Your trade magazines are doing a constructive job in keeping you up to date in matters of technical and scientific progress and of business conditions. However, unless you have skilled help, in key positions at least, it is going to be difficult to keep the business head above water.

Each spring for the past four years, the School of Horticulture of the State Institute of Agriculture, at Farmingdale, L. I., N. Y., has been besieged with inquiries for young men and women trained to work in their respective fields. In normal times we were striving to meet these demands and a year ago were seeking some means of expanding our teaching facilities to train more persons. However, the war has made this expansion unnecessary for the time being. This year employers' requests have increased, but the number of graduates and undergraduates is fewer. This condition is true of all other horticultural schools as well.

During these days when sky-high wages are offered by the war industries, fewer students are being attracted to the horticultural field. This is quite natural, but there are some persons interested in horticulture who should be encouraged to train for this field. It is the duty of the vocational horticultural school to serve the interests of both the horticultural employers and the students training for employment. We at the State Institute stand ready to help you by training prospective employees, and we offer a curriculum which will furnish the knowledges and skills necessary for them to enter your employment. Since October, 1940, the students in ornamental horticulture, graduates and others have taken advantage of three courses in the principles of camouflage which have been offered as an extracurricular activity. In addition to our regular eighteen months' course in ornamental horticulture, we shall offer shorter training, if advisable, to meet the needs of specific groups.

To care for future employment needs we urge that you personally encourage horticulturally inclined high school graduates of seventeen or less, and women who might make good employees, to apply for entrance in a good horticultural school. Make no mistake about it, you will benefit, directly and indirectly.

Employment records of the institute show that its graduates are successfully using their abilities in many fields. It must be recognized that young graduates are usually not expected to enter employment in managerial jobs, but are encouraged to start from the bottom. After a good apprenticeship, the graduate, depending upon his abilities and personality, has progressed rapidly.

One graduate who received his diploma in ornamental horticulture in 1934 has recently accepted a position as superintendent of a large new park cemetery at Cleveland, O. Another who was a member of an earlier class is now assistant superintendent of maintenance in the Long Island park commission. Still another graduate is field manager of one of the largest bulb farms in the east. In the landscape field a member of the 1940 class is head of the landscape department of a large nursery in western New York

state. These are but a few of the positions attained by outstanding students. Each year, between ninety-six and 100 per cent of the graduates enter horticultural employment in various capacities.

We suggest that evidence such as this merits consideration. It is the direct outcome of a course planned to meet the needs of growers, public and private maintenance companies and of horticultural supply houses.

The regular course in ornamental

CLASSIFIED ADS

**Five lines, \$1.00,
each additional line, 20 cents,
per insertion.**

Let these little liners move
your stock easily and cheaply.

Peonies: Tree and Herbaceous, best varieties.
Oberlin Peony Gardens, Sinking Spring, Pa.

NATIVE SEEDLING PEACH PITS.
Counting 6000 and up per bu. Offered for August and September delivery.
WAYNESBORO NURSERIES, INC.,
Waynesboro, Va.

PACHYSANDRA.
Rooted cuttings \$20.00 per 1000
2 1/2-in. pots, 1-year 50.00 per 1000
2 1/2-in. pots, 2-year 80.00 per 1000
NICK'S NURSERY, ANCHORAGE, KY.

MAZZARD SEED.
PLACE YOUR ORDER NOW FOR NEW CROP
MAZZARD SEED, testing 90% and up germination. For July and August shipment.
WAYNESBORO NURSERIES, INC.,
Waynesboro, Va.

EVERGREENS, 2-YR. SEEDLINGS.
Fall shipment. List ready July 1. Scotch Pine, Douglas Fir, Colorado Blue Spruce, Norway Pine, White Pine, Red Cedar (1-yr.). Prices low. Also a big selection of 3-yr. and 4-yr. transplants.
BRADEN NURSERY, SOUTH WINDHAM, ME.

GLOXINIA PLANTS.
\$13.50 per 150, \$33.75 per 450.
FREIGHT PREPAID.
Hybrida Mixed, assortment of dark rich colors.
Red Admiral, deep crimson, frilled edge.
Brunhilde, pure white.
Emperor Frederick, scarlet with white band.
Emperor William, violet with white margin.
Monterey Rose, soft rose.
Sky Blue, name accurately describes color.
READY FOR 5 OR 6-IN. POTS.
Plants come 150 to a flat and one variety to a flat except Hybrida Mixed.
SOLID FLATS SHIPPED ONLY.
NURSERYMEN'S EXCHANGE,
4950 Fulton St., San Francisco, Calif.

PEAT

MICHIGAN PEAT.
26 YEARS' RELIABLE SERVICE TO THE
TRADE! More for your money. Large 100-lb. bag
contains about 5 bus. COMPARE!!!!

1 to 9 new burlap bags \$1.25 each
10-bag lots, burlap bags 1.10 each
20-bag lots, burlap bags90 each
F.o.b. plant, Capac, Mich.
Low prices carloads, truckloads. Free sample.
AMERICAN SOIL SPONGE SEALING CORP.,
267 Fifth Ave., New York, or Capac, Mich.

HELP WANTED

HELP WANTED.
Salesman wanted, commission basis. Must have
some knowledge of landscape work.
TRAUERNICHT NURSERY CO.
Fort Worth, Tex.

HELP WANTED

Nurserymen, skilled in planting, propagating
and some greenhouse experience. State other
qualifications. Permanent year-around employ-
ment. Position is in northern Michigan. Must
be willing to do other work to fill in time during
winter months.
A. C. Fischer, c/o Pleasantview Laboratories,
Harbor Springs, Mich.

horticulture is of eighteen months' duration, after which the student must complete six months of approved employment. This course is continuous, starting in September and ending a year from the following March. The first two semesters cover the basic subject matter and the essential field practices preparatory to entering one of the three major divisions of the second-year curriculum.

Instruction during this period goes hand-in-hand with application, with approximately half the time given to each. In the nursery, pinetum and shrub collections the care of trees and woody plant materials is developed through study and practice in root pruning, fertilizing, cultivating, transplanting, winter protection, grading and storing for selling, and tree repair work.

Planning and constructing small gardens, as well as the maintenance and improvement of the campus grounds, gives the students a working knowledge of walks, steps, walls and pools, of lawns and of flower borders in all the phases of construction and care. This work is supplemented by landscape planning in the classroom and by surveying on the campus grounds.

This type of training is only possible where the work groups are relatively small and personal guidance may be given by the instructor.

The foregoing information is given in more detail in the announcement of the School of Horticulture. Applications for fall entrance may be made up to September 1 and should be addressed to H. B. Knapp, Director, State Institute of Agriculture, Farmington, N. Y.

C. F. Wedell, Head,
School of Horticulture.

THE Northland Nursery, Baden station, St. Louis, Mo., has been purchased by Finley D. Keith.

PAUL C. PRITCHARD, of the Pritchard Nurseries, Ottawa, Kan., has the sympathy of the trade in the recent death of his mother.

GLENN H. HOUGH has moved from Coshocton to Kent, O., and is buying lining-out stock for the new location.

RAY GLASER, associated with the Hoyt Nursery, St. Paul, Minn., for more than eleven years, was drafted recently and is now with the army.

SOUTHWESTERN NEWS.

The Lawson Landscape Service, McPherson, Kan., was low bidder on landscaping a defense housing project at Kansas City, Kan., for approximately \$8,000. Bids were opened May 29.

Bob Baker, Baker Bros. Nursery, Fort Worth, Tex., made a business trip to Kansas City the latter part of May. His firm landscaped several government projects this spring.

The Kansas state highway department is advertising for bids on roadside improvement projects in Cheyenne, Norton and Osborne counties.

Edwin R. Chandler has resigned his position as member of the Kansas City park board and has filed for the Republican nomination for judge of the western district of the Jackson county court. Mr. Chandler, who is secretary of the Chandler Landscape & Floral Co., Kansas City, Mo., was the Republican member of the park board appointed May 15, 1940, by Mayor Gage. He is married and has one son, Scott Chandler, 9 years old.

Equipment which has been used to maintain middle western shelter belts is going to California to grow rubber for the war effort. A caravan of seven trucks, carrying office equipment and tools, left Hutchinson, Kan., for a west coast guayule rubber plantation the last of May.

Charles Hanford, Jr., who operated a nursery sales yard at Muskogee, Okla., during the spring season, is now back at Independence, Mo.

J. H. Skinner & Co., Topeka, Kan., report a good retail business this spring. The supply of fruit trees around Topeka, which is an important center of their production, is much smaller than usual this year. The supply of fruit tree seedlings is also somewhat limited.

Stark Bros. Nurseries & Orchards Co., Louisiana, Mo., reports a good increase in business and is optimistic about the immediate future. It feels that the nursery business is an essential industry in that it produces fruit trees for food, and trees and shrubs for camouflage protection and morale building. Its opinion is that there is a reduced supply of nursery stock for the coming season.

Kenyon's Nursery, Oklahoma City, Okla., reports that its part of the state had so much wet weather in April and May that planting and other nursery work have been delayed. The

PLATE BOOKS for Nurserymen

Book A. Illustrates in full color 235 standard nursery items, brief description, substantially bound. Price in small lots, 75c each.

Book B. Condensed edition, 120 items illustrated in full color. Price in small lots, 35c each.

Descriptive Nursery Catalogue

Nicely illustrated, 48 pages and cover. 18c each in small lots.

Will send sample copy of each of the above on receipt of \$1.25. Cash with order.

Correct Planting Methods

A pocket-size 48-page booklet. Very complete but concise information, well illustrated. Helpful in preventing claims for dead stock that cost nurserymen money. Sample, 10c. Write for discounts on quantities.

Made to Order

Catalogues, Folders, etc., with illustrations in full color or one color. Thousands of engravings available. Send your specifications or samples for estimate and suggestions.

A. B. MORSE COMPANY
ST. JOSEPH, MICHIGAN

ATTENTION NURSERYMEN!



IMP. SOAP SPRAY

Use 1 part with 25 to 40 parts of water

Ask your nearest seedsmen, or write for literature.

THE AMERICAN COLOR AND CHEMICAL CO.
170 Purchase St. Boston, Mass.

ARIENS-Tiller



The American
TILLAGE COMBINE
3 MODELS TO FIT
TO FIT
EVERY NEED
ARIENS CO.
Box 710 Brillinn, Wis.

North Dakota and Montana Seeds

Northern-grown Tree, Shrub and Wild Flower seeds. Wholesale crude botanicals.

E. C. MORAN MEDORA, N. D.

R. TO LAND MORE BUSINESS

Ask Woodruff about special series of planning lawn mixtures adapted to particular locations. Write to F. H. Woodruff & Son, Inc. Millford, Conn.

WOODRUFF LawnSeed

HYPONEX PLANT FOOD

HYPONEX is a complete plant food and so accurately balanced that it will grow superior plants in soil, or even sand or water. Use HYPONEX for germination of seeds (helps to prevent damping-off). Cuttings (keeps them succulent until ready for transplanting). Transplanting (reduces shock and wilting), and for general feeding of flowers, vegetables, trees and lawns. Better and more vigorous root systems. Greater substance in stems, larger flowers.

Buy from your Jobber or send \$1.00 for 1-lb. sample (makes 100 gals.), dollar credited on first order for 1 case for resale or 10-lb. drum for own use.

Write Jobber or direct to us for dealers' and growers' prices. Retail prices: 1-oz., 10c; 3-oz., 25c; 1-lb., \$1.00. Also sold in 10, 25, 50 and 100-lb. drums.

HYDROPONIC CHEMICAL CO., Inc.

315 West 39th Street

New York

GENUINE MOSS PEAT

Hydraulic pressed bales and smaller resale packages. Sphagnum Moss, Cultivated Peat Humus.

Shipped from Northern plant at Floodwood, Minn., and Hanlontown, Iowa. Annual capacity 1,000 carloads.

Now booking for present and future deliveries.

Write or wire for quotations.

Colby Pioneer Peat Co., Inc.
Hanlontown, Iowa



The GRAVELY
GARDEN TRACTOR &
POWER MOWER

Write for facts.
GRAVELY MFG. CO.
Box 712
Dunbar, W. Va.

The ideal machine for the Commercial Grower...
Goes in narrow rows...
Has ample Power.

SUPPLIES - TOOLS

Electric Hammer

**For Tree Surgeons
Landscape Men
Nurserymen - Growers**
Send today for a new issue of the BLUE BOOK

AMERICAN FLORIST SUPPLY
CHICAGO

MORE PROSPECTS

mean better prices and larger sales.

You can get them by advertising stock in

THE AMERICAN NURSERYMAN
508 S. Dearborn St., Chicago, Ill.

labor situation also hindered them and seems to be growing worse.

Lawrence Kelly, who was with the state highway department and before that with the Kansas Landscape & Nursery Co., Salina, Kan., is now working on a defense project at Dallas, Tex.

Lieut. Lloyd M. Copenhafer, until recently extension landscape architect with the Kansas State College, Manhattan, is stationed at Fort Leonard Wood, in Missouri, in charge of landscaping.

The Martin City Flower Garden, Martin City, Mo., is the name of a new organization, owned by J. D. Judd. The specialties are perennials and rock garden plants.

J. Frank Sneed, Oklahoma City, Okla., a member of the executive committee of the American Association of Nurserymen, made a business trip through Kansas and Missouri, the middle of May. He tells the same story of adverse weather conditions and difficulties in getting experienced help. The weather in March was so dry that heavy losses resulted in stock which was lined out and was followed by such wet weather in April and May that planting has been much delayed.

The recent record-breaking flood at Great Bend, Kan., did not damage the nursery of Herbert O. Schrepel, though the high water came uncomfortably close and the routine of work was disrupted to some extent, as some of his employees were living in the flooded area.

A nurseryman's "Believe It or Not": Forty-five years ago a post card was mailed at the Rockford, Mich., post office addressed to the Sherman Nursery Co., Charles City, Ia. It was delivered only recently, having been in the Michigan post office all that time and not discovered until clean-up day in the post office. The Charles City paper reported this, and the item was reprinted in a California paper under the heading "Unsatisfied Customer." A former employee of the Sherman Nursery Co., now a soldier stationed in California, saw the item, clipped and mailed it to the Sherman Nursery Co.

THE employees of the Forest Nursery Co., McMinnville, Tenn., have signed up 100 per cent on the pay roll allotment plan to purchase war defense stamps and bonds.

RAFFIA

FOR BUDDING, GRAFTING
AND OTHER NURSERY WORK.

BULBS

TULIPS
DAFFODILS
LILIES

PAPER WHITES
CALLAS
AMARYLLIS

We are always glad to quote prices or give additional information—write us.

McHutchison & Co.

95 Chambers St., New York City

Established 1902

(Our 40th Anniversary)

LABELS FOR NURSERYMEN

THE BENJAMIN CHASE COMPANY

DERRY, N. H.

MAKE MORE PROFIT

Sell Your Roses, Perennials, Shrubs, Vines and Fruit Trees Started and Growing in

CLOVERSET PLANT POTS

Nursery Stock grown in Cloverset Patented Pots can be sold and planted without wilt to bud or bloom any time from March until freezing weather. Write today for Free Illustrated circulars and testimonials from users of these pots.

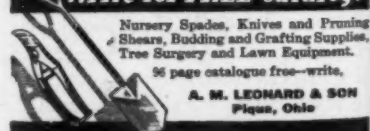
Carton of samples by mail 25c.

CLOVERSET FLOWER FARM

ERNEST HAYSLEY and SON
10520 Broadway, Kansas City, Mo.

Domestic PEAT MOSS
For All
POULTRY and AGRICULTURAL REQUIREMENTS

TARDIF DOMESTIC PEAT SALES CO.
WAUKESHA, WISCONSIN

Write for FREE Catalog!

Nursery Spades, Knives and Pruning Shears, Budding and Grafting Supplies, Tree Surgery and Lawn Equipment.

96 page catalogue free—write.

A. M. LEONARD & SON
Piquette, Ohio

Again — Covers in Full Color

PRE-CONVENTION SPECIAL NUMBER

of the

AMERICAN NURSERYMAN

JULY 15 — last forms close July 8.

Plant pictures in full color on four cover
pages make this special number outstanding.

Record advertising of supplies, equipment and
stock makes it an annual buyers' directory.

Cover, advertisements and editorial features
make it prized by readers through the year.

{ Plan now for conspicuous
space in the Pre-Convention
Number. Readers will look
for your advertisement and
will see it again and again. }

Sixty-seventh Annual Convention

AMERICAN ASSOCIATION OF NURSERYMEN

Hotel Muehlebach, Kansas City, Mo.

July 21 to 24, 1942

AMERICAN NURSERYMAN

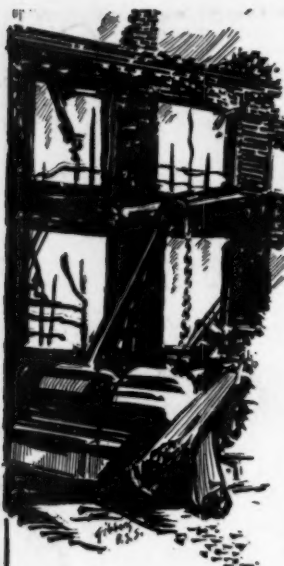
THE Magazine Nurserymen Everywhere READ!

EARLY-BIRD NUMBER

July 1 — forms close June 24

To reach the trade well in advance of the convention, use the early issue. Announcements of exhibits, or representatives to be in attendance at the convention, will help you book more and better orders for the season ahead.

508 South Dearborn Street
Chicago, Ill.

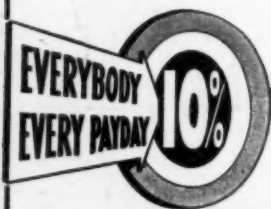


TARGET FOR TONIGHT

...Your Business?

Maybe they won't actually come and drop a bomb on your business, but the Axis war lords have their eye on it, just the same. They want to wipe it out as a competitive force—or take it over lock, stock, and barrel. Here is a threat that you can reply to *now*, today, and in no uncertain terms—by buying War Bonds to the very limit of your powers, that our armed forces may have the guns, tanks, and planes they need to crush the Axis once and for all.

THE GOAL: 10% OF EVERYONE'S INCOME IN WAR BONDS
Every American wants the chance to help win this war. When you install the Pay-Roll War Savings Plan (approved by organized labor), you give your employees that chance. For details of the plan, which provides for the systematic purchase of War Bonds by voluntary pay-roll allotments, write: Treasury Department, Section S, 709 12th St. NW., Washington, D. C.



Buy War Savings Bonds

This space is a contribution to America's All-Out War Program by
AMERICAN NURSERYMAN

Standardized Plant Names

**COMPLETELY REVISED
GREATLY ENLARGED**

Lists approved scientific and common names of plants in American commerce or use.

90,000 entries
Nearly 700 pages

Should be on the desk of every buyer and seller of plants—when you prepare your catalogue, when you check contract specifications, when you order from catalogues or price lists, when you seek the correct botanical or common name of any plant.

\$10.50 per copy

Order from

AMERICAN NURSERYMAN
508 S. Dearborn St.,
Chicago, Ill.

Experienced Growers
Know Why There Are

3

**HORMODIN
POWDERS**

Experienced florists who propagate everything from chrysanthemums to evergreens, realize that no single-strength root-inducing powder can propagate efficiently over so broad a range. That is why Hormodin Powder has been developed in three strengths to parallel the range of hormones in nature:

HORMODIN POWDER No. 1

The general-purpose powder—designed to root carnations, roses, and many other house, garden, and greenhouse plants.

HORMODIN POWDER No. 2

For propagating many woody and semi-woody types.

HORMODIN POWDER No. 3

For propagating many evergreens and dormant leafless cuttings.

THE TREATMENT

The treatment is simple. Moistened stems are dipped into Hormodin Powder, then placed in the usual propagating medium.

THE COST

The cost is small. For example: the one pound tin of Hormodin Powder No. 1 (the general-purpose powder) costs only \$3.00. It is estimated that each ounce will treat about 2500 cuttings of average size.

THE RESULTS



Left: Untreated Azalea cuttings.
Right: Azalea cuttings treated with Hormodin Powder.

Be sure to ask your dealer for the

HORMODIN POWDERS

Best suited for your purpose

Booklet on request

MERCK & CO. Inc. Manufacturing Chemists **RAHWAY, N. J.**
New York • Philadelphia • St. Louis • In Canada: Merck & Co. Ltd., Montreal and Toronto

